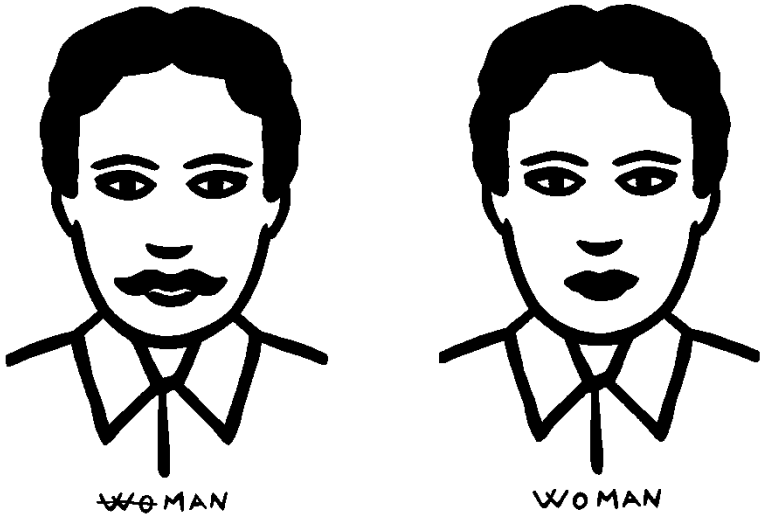
Gentle Women, Genius Men

A study into Implicit Gender Association with Artistic Occupations



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Abstract

It is already researched multiple times in what fields of work and research there is an underrepresentation (e.g. CEO's) or overrepresentation (e.g. nurses) of females. Males are being associated with higher levels of occupations among different work fields. Although there is no research done yet to see whether the art sector is also gendered, gender stereotyping within this sector is not something
g new. Kant already made a statement in 1790 where he suggests that there is something as the male "artistic genius". There are considerably more successful male artists, but different elements of the art world (e.g. arts educations, still lives) are associated with femininity. Therefore, this research aims to study the paradox that exist within the art sector. On the one hand the artistic genius is associated with men, but on the other hand women are associated with different elements within the sector. The associations people make have an influence their behavior. This leads to issues such as boundaries when entering certain work fields or applying for certain jobs.

By researching if and how occupations in the art sector are implicitly and explicitly associated with a specific gender, this study aims to make the boundary to enter smaller. By using implicit and explicit measures, this study will look for the reasons behind stereotyping. To measure the gendered biases, this research uses two different Implicit Association Tests (IAT). The first IAT looks for biases against artistic occupations versus non-artistic occupations and the second IAT focusses solely on artistic professions. The first hypothesis expected artistic jobs to be easier associated with femininity and non-artistic jobs quicker associated with masculinity. By confirming this hypothesis, this study validates that both genders, different educational backgrounds and ages all had no effect on this bias. This means that the gendered association is not limited to certain part of society, but it is a general stereotype made by a large group of people.

The second hypothesis expected a stronger association between masculinity and responsibility profession compared to responsibility and female professions. By confirming this hypothesis and finding no significant effects from the background variables, this stereotype was also more general instead of linked to a specific group within society (e.g. age, gender, educational background). In summary, the biases of men having more responsibility in their profession and females being associated quicker with artistic occupations suggest that art is only associated with masculinity if there is an element of success involved.

KEYWORDS*: Implicit Association Test, IAT, Gender, Stereotyping, Female Occupations, Art World*

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1. Introduction

In February of 2017, The Guardian published an article explaining how female artists were erased from history books. According to Sydie (1989), and later on by Ellis - Petersen (2017), there are few female artists who are known and well-established in the art world. Plautilla Nelli is a great example of this. She was a female artist who had been labeled as "another nun with a paintbrush" by critics for a long time. In contrast to what these early critics said, Ellis - Petersen explains that Nelli's work was reconsidered by art historians and museum curators who have viewed her work more recently – no longer seeing her as just another nun, but in fact a talented artist. After 500 years of absence from art history, her work was exhibited in the Uffizi in Florence in 2017 (Ellis – Petersen, 2017). This is only one example of a woman being misjudged based on her gender, but it is far from an exception. In fact, one could argue that there is an imbalance when it comes to gender in the artworld. Female artists struggling for recognition are in no way a thing of the past. Contemporary female artists still face this problem. Numbers from different museums and galleries show that over the last couple of years, art exhibitions were largely dedicated to male artists (Ellis – Petersen, 2017). Even though numbers of well-known female artists have been increasing over the last couple of years, it is still a long way to match the numbers of their male counterparts (Sheets, 2016).

The absence of women on the one hand and male artists on a pedestal on the other is something that has been present for a long time, if not always, in the art sector (Sydie, 1989; Piirto, 2000). In 1790, Kant shared his theory about art and the quality of it. This theory started from the idea that there is something called the "Artistic Genius". This genius is closely connected to the art itself and instead of earning this status through hard work and study, Kant (1790) argued that this touch of artistic genius could only be inherited. Furthermore, it seemed that the only people able to possess this kind of genius were men. Following this theory, artistic excellence became closely connected with masculinity.

If we look at artistic excellence and the extent to which it is recognized nowadays, the theory of Kant still seems relevant. Absence of women is not just limited to the smaller numbers of successful female artists, but it is "visible" throughout the sector in different ways (Nochlin, 1988; Piirto, 2000; Wikberg, 2013). Even in the (rather exceptional) cases where female artists are included in the canon, this is accounted for in thoroughly gendered terms as well – they are expected to have a male artistic role model (such as the father), so their conditions are considered to be rather exceptional for women (Nochlin, 1988). Looking further than just the numbers, Parker and Pollock (1981) have researched art forms that were associated with women in particular. They discovered that different categories and forms of

art mostly created by women were seen as superficial and decorative. By absence of any other convincing reason, they concluded that the art by women was considered inferior to art by male artists solely on the basis of the artist's gender (Parker & Pollock, 1981).

However, this does not mean that there are no women at all present in this sector. There are no female equivalents for Rembrandt, Picasso or Warhol (Nochlin, 1988; Piirto, 2000), but as cited by Ellis – Peterson (2017), there are female artists who according to contemporary critics deserve more recognition than they have received in the past. These women were ranked lower. They did not get the same opportunities and benefits as the male artists did in that time. This led to women being less educated. In practice, this meant that women were limited to a certain genre of paintings, such as still lifes. They were not allowed or trained to paint nudes for example. Since this was a popular genre, they were forced to seek other genres. Still lifes were closely associated with natural character. They were literally a portrayal of nature and all its changes and emotions. Since women were linked to these elements, still lifes were deemed suitable for female artists. This resulted in still lifes being considered a common reflection of femininity (Parker & Pollock, 1981).

Associations of certain elements or ideas with a certain type of gender are not uncommon. In 1977, Panek, Rush and Greenawalt researched to what extent certain fields of work are associated with either femininity or masculinity. Some fields are associated with traits *perceived* as feminine, and therefore women, such as nursing. On the other hand, there are jobs that are more associated with masculinity due to their "masculine" traits (such as power). This line of reasoning explains why positions of leadership are often assigned to male figures. The discourse surrounding gender is dominant throughout society, which makes it difficult to observe work fields as gender (un)equal. At the same time this also leads to barriers for people wanting to enter certain fields (Panek, Rush & Greenawalt, 1977).

A similar type of association is also visible in the arts sector. Arts education is an aspect of the arts sector that is often closely linked to women. According to Wikberg (2013) arts education is a gendered subject during elementary school and high school. She states that girls receive higher grades than boys for art related subjects and the subject itself is perceived as feminine. Moreover, girls are not only linked to arts education during their earlier school careers, but after high school this imbalance seems to continue. Different studies in the arts and culture fields have larger numbers of girls than boys. 78% of the students who start an art training are female in the Netherlands (Studiekeuze123, n.d.). 85% of the freshmen who start the arts and culture studies bachelor at the Erasmus University of Rotterdam are female, while the total number of women (8712) that start at this university is nearly the same as the number of men (8652) (Annual Report Erasmus University, 2016; studiekeuze123, n.d.). Clearly, arts education is more attractive to women, which also implies that jobs in the arts sector are more attractive to them, because these studies prepare people

to become part of the professional arts. Just as many work fields and subjects, the arts seem to be highly gendered. There seem to be certain stereotypes surrounding the arts. "*Even when objectively wrong, stereotypes simplify social perception and serve as guidelines for social interaction"* (White & White, 2006). However, in the art world specifically, this leads to a paradox. Artistic excellence and being a successful artist is something that is characterized by its masculine identity. Arts education and certain specific types of art - still lifes and nature inspired paintings – on the other hand are strongly linked to women. This leads to the question to what extent professions in the artworld are associated with either femininity or masculinity and more importantly, what are possible reasons for these associations?

As mentioned before, Kant (1790) connected art with artistic genius. Essentially, he therefore put the responsibility for the great art with artists. Moreover, in his view there was an inevitable link between artistic genius and masculinity. This implies that creativity is a male property, but more generally it might also mean that only men can carry responsibility. This idea corresponds with the typical characteristics of some masculine occupations. It is possible that artistry as such is associated with femininity, but that it is primarily success and power that is linked to masculinity (whether in the art sector or elsewhere). This is why this study also aims to see if artistic occupations that are considered to be characterized by responsibility are indeed associated more with masculinity.

By pinning down these associations, this study aims to see if there are biases regarding gender in certain occupations within the field. Associations – or attitudes, can lead to certain barriers in work fields (Panek, Rush & Greenawalt, 1977), discrimination of not only on a gender level (Nochlin, 1988), but on racial level as well (Ashburn-Nardo, Knowles & Monteith, 2003). Since these attitudes are embedded in our culture – and mental structure, they also influence behavior (Fazio, 1986). Without being consciously aware of it, people have individual mental associations that have been proven to play an important role in their behavior, affect and cognition (Fazio, 1986; Greenwald, Poehlman, Uhlmann & Banaji, 2009). Thus, measures that are implicit or indirect can not only be important tools within research, but also revealing (Greenwald & Banaji, 2017).

An instrument used to measure these types of associations that also had a major impact on sociology and social psychology is the Implicit Association Test (IAT, Fazio & Olson, 2003). If this study would focus on questionnaires or interviews, people might not be willing or able to answer honestly about gendered occupations due to political correctness. By performing an IAT, this research aims to avoid such issue. In contrast to a regular survey, carrying out an IAT makes it possible to expose deep-seated associations about these gender issues. This method of research will be used to see first of all if artistic occupations are associated with either masculinity or femininity.

On academic levels, this research will focus on seeing if there is a link between people's implicit and explicit associations. Does their cultural background influence the way they act and react to certain stereotypes? From this perspective this study researches if the common used associations to indicate certain imbalances, are explainable. This is often done without any empirical substantiation, after the research is completed. The differences are visible within a certain sector or field and after research it becomes clear that there are indeed firm associations. However, these associations are not researched or justified. It is unclear why the associations are made or what influences these attitudes. By comparing explicit and implicit associations and looking at the characteristics of these attitudes, this study tries to not only describe the associations but explain them as well. On a social level, it seems outdated that certain occupations are being perceived as either feminine or masculine – especially in the progressive arts. This study will clarify that there are still some attitudes that lead to gendered occupations. And thus– although not recognized, lead to barriers for entering certain work fields for the opposite sex to enter. By stressing the gendered attitudes among people within the sector, I want to make people aware of the necessity for attention relating this ongoing problem.

By following different steps, this study will complete to achieve the above-mentioned relevance. Before conducting Implicit Association Tests, this study will first go through the previous literature relevant to this current study. After theoretically setting out the research problem, the thesis will present hypotheses that will help answering the research question. Chapter 3 will then provide a comprehensive overview of the methods applied in this research. Findings will be reported in chapter 4 and discussed in relation to the hypotheses in chapter 5. Finally, in the discussion part of this study I will address if and how professions within the artworld are associated with either masculinity or femininity.

2. Theory

2.1 Females in the artworld

As described in the introduction, there is an unequal gender division in the art sector. The following part of the paper will elaborate on this division and where the issues specifically lie. The canon of the artworld has few women in it (Sydie, 1989; Wikberg, 2013; Ellis – Petersen, 2017). Linda Nochlin already studied this phenomenon in 1988. She argued that the answers to the question of unequal representation have varied in sophistication and range over a long period of time. By way of illustration, Nochlin (1988) mentions that some have even argued that it was "scientifically proven" that humans with wombs have a large inability in comparison to those with penises when it comes to creating something significantly (Nochlin, 1988).

As mentioned previously, Kant (1790) had similar theories suggesting that the male gender is superior to the female gender due to biology. Originality was, according to Kant, the essential characteristic of the artistic genius. The idea was that this type of genius was a special talent to produce ideas that were labeled as non-imitative. In the first part of Kant's Critique of Judgment (1790, §46) he described the genius as follows: *"Genius is a talent for producing something for which no determinate rule can be given, not a predisposition consisting of a skill for something that can be learned by following some rule or other"*. Summarizing, this means that according to Kant, artistic talent was not something that can be taught or trained, but it was something that you are either born with or not. And, more specifically, the artistic genius was always referred to as being a man.

Although Kant and many after him have assumed that this accounted for the gender difference in the arts when it came to representation, Nochlin (1988) herself did not agree. She argued that women's situations and experiences in society are different from those of men, and this applied to artists as well. Whereas many researchers found answers in the concept of femininity and what (not) belonged to their expertise, Nochlin moved forward. She believed that it was more of an issue regarding the misconceptions that were shared within the public about what art is. It was not merely a direct, personal expression, but it involved a *"self-consisted language of form, more or less dependent upon, or free from, given temporally defined conventions, schemata, or systems of notation, which have to be learned or worked out, either through teaching, apprenticeship, or long periods of individual experimentation"* (Nochlin, 1988, p 2.).

The absence of women did not lie, contrary to what Kant believed, in the biology or hormones, menstrual cycles or the stars, but in the educational system and institutions (Nochlin, 1988). Besides the absence of great female artists, there were also no Eskimo tennis players or black American equivalents for the same matter. The unequal division, not only in the artworld, but in different fields of work and study, starts when we enter the world. From

that moment onwards, we are influenced with meaningful signs, signals and symbols (Nochlin, 1988; Buikema & Van Der Tuin, 2009). These influences lead to stereotyping and indifferences in the representation of women in the artworld.

Does this mean that there is no such thing as a female artistic "genius" or no females existing in the art sector? On the contrary - Wikberg (2013) studied school subjects and found that art in secondary school was actually more associated with girls than with boys. This was contradictory to the representation of the women later on in life. Whereas the subject of arts education was associated with femininity, professional artworks by men were valued higher than those of women (Wikberg, 2013). On average, males were paid more for their artworks than females. There seems to be a "*male-coded quality concept"* that led to men's artworks getting chosen over the work of women, not only in the public environment, but in galleries as well. As a result of the underrepresentation of women's art, it was the art created by males that reached more people (Wikberg, 2013).

Summarizing, this means that there are women in the art world, but mostly on lower levels, such as in teaching. To some extent, creativity is associated with femininity, but when it comes to being successful or a well-respected artist, the females are missing out. This indicates that there is a glass-ceiling for women within the art sector: they are represented, but not in highly positioned jobs. Another example where this issue is highly visible is the film industry, where there is a clear underrepresentation of women in prestigious or powerful positions, such as directors and producers. In 83 years of Oscar nominations for best director, there was a total of 4 females nominees and only 1 took home the Oscar. This was not even that surprising, since the majority of voters from the Academy of Motion Picture Arts and Sciences were males (Fithian, 2012). In turn, this led to insufficient roles for female actors as well (Fithian, 2012).

The image of the male artists is being reproduced constantly in different layers of society and life (Wikberg, 2013). Art became associated with women when it was conceptualized as expression of feelings. This is clearly visible in schools, but as soon as adolescents trade schooling for professional careers, this idea is no longer relevant. The idea that art and creativity are strongly linked to femininity seems to dilute and men take over. This paradox puts the human capital theory and the idea of culture as a cognitive structure against each other. The following theory sections will focus on this paradox by setting out both theories.

2.2 *Human capital theory and stereotyping*

Workplace segregation is characterized by women and men working in different occupations (Polachek, 1975; England, 1982; Klomsten, Marsh & Skaalvik, 2005). A possible explanation for this occupational sex segregation can be found in in the human capital theory. This line of

thinking starts with the idea that female employment is merely intermittent due to their domestic responsibilities. Stereotypically, women are more expected to stay at home with the children and take care of the household in comparison to men. Since these females are out of the work force for a while, their skills devalue. Following this theory, women who already are planning to spend a large amount of time outside the work force, will choose a job with low standards when it comes to consequences when leaving the work force for a longer period of time. According to Polachek (1975), these decisions are economically rational and lead to sex segregation in the work force. Men and women who are planning on making careers and not leaving the work field for a longer period of time will have no reasons to stay away from jobs that have higher risk when it comes to depreciation.

However, England (1982) researched the ideas behind sex segregation Polachek (1975) discussed and found no evidence that women in fact choose traditionally feminine occupations because this was economically rational. She, however, suspected that women could have higher wages if their education, home time and experience are more similar to those of men.

This does not mean that there is no sex segregation in the work force, but that the human capital theory may not be the best answer. Panek, Rush and Greenawalt (1977) have studied sex stereotypes in different occupations. Although they did not specifically research the reasons behind these gender stereotypes, they did believe that one possible explanation for the attitudes against occupational sex stereotypes was created an upheld by society as a norm (Panek, Rush & Greenawalt, 1977; Klomsten, Marsh & Skaalvik, 2005). There were consensually endorsed and clearly defined norms that differentiated between what was an appropriate image for women as well as men. This led to occupations obviously being associated with members of one of the two sexes. As mentioned in the introduction of this paper, Panek, Rush and Greenawalt (1977) attached value to this phenomenon because this segregation could be a barrier for the opposite sex to enter a certain field of work.

Their research focused on 25 occupations. Out of these occupations, eight were significantly perceived as male occupations. These occupations were lawyers, city planners, police officers, letter carriers, truck drivers, bankers, bakers and offices managers. They also found six occupations that were perceived as being specifically female: elementary school teachers, dieticians, social workers, typists, librarians and nurses. The occupations not belonging to either sex specifically, were perceived as neutral (Panek, Rush & Greenawalt, 1977).

While Panek, Rush and Greenawalt (1977) focused on occupations specifically, research by Wikberg (2013) looked into sex stereotypes earlier on in life. She studied different subjects in secondary schools. While her study focused mostly on arts education, she also indicated for the other subjects what differences there were between males and

females, as according to her gender differences, also within school subjects, had great consequences. She mentioned how claiming physical education as a domain strictly for boys, was perceived as less controversial than doing the same for girls and arts education. For boys there was a greater consensus when it came to claiming something to be masculine, or in this case "boyish", in contrast to a claim about femininity in school subjects. Besides physical education, mathematics, technology and physics were also subjects closely linked to masculinity. The association of these subjects with males were perceived as nothing more than just common sense. The paradox however, lies with subjects such as arts education. The characteristics of these subjects (such as emotions, expression and feelings) are often linked to feminine connotations but the great artists discussed in class are males (Pen Dalton, 2001; Wikberg, 2013).

Besides these claims about gendered subjects, the grades also indicate some gender differences within school subjects (Wikberg, 2013). The differences in scores between boys and girls were in fact highest for physical education and art. On all subjects, girls tended to score higher grades except for physical education. On this subject boys received on average more than 1 point higher than girls. Arts education grades, by contrast, were marked more in favor of girls, who scored almost 3 points higher on average than boys did for this subject. These results concerning the gendered school subjects, did not necessarily mean that the whole area of the subject was gendered. Mathematics for example is an area that is strongly linked to masculinity, however girls receive higher grades in school for this subject. Whether or not an area of expertise was gendered, had nothing the do with how well children did in their school careers. But, had everything to do with solidified and rarely questioned assumptions. The phenomenon being, that the better performances of girls in school, do not give them any advantages later on in life (Walkerdine, 1998; Wikberg, 2013). However, if we would expect that these inequalities are (only) justified by the human capital theory, artistic occupations will be linked to either masculinity or femininity. Instead, it depends on something else. When it comes to occupations that have more status or responsibility, they are suddenly more related to men instead of women. This is where culture as a cognitive structure becomes part of the picture.

2.3 Cognitive structure and traits of femininity and masculinity

In the section above, it became clear that to some extent there were occupations that were generally seen as either feminine or masculine. One approach towards culture is that it can be seen as a cognitive structure. This approach focusses around the idea that our embedded culture enables us to use cultural narratives and codes in an arrangement of meanings. Zerubavel (1997) describes how messages from society do not only enter our minds, but also influences the way our mind is organized: "*it also affects the way we classify the world"*

(Zerubavel, 1997, p. 53). It enables people to distinguish between which food is edible and which is not, which animals are predators and those we can safely keep as pets (Zerubavel, 1997). Classifying objects, animals and people is a social act that is not performed by one person, but by society as a whole, as *social beings*. These classification (classical versus popular music for example) are not necessarily logical or natural. They are embedded in our culture and mind. Where the human capital theory focusses on the skills someone develops and the profits they get out of it, this approach recognizes that some elements within society are not dependent on skill.

Associations – or attitudes, are an example of classification. Associations are two (or more) concepts that are strongly linked to each other (Hofmann, Gawronski, Gschwender, Le & Schmitt, 2005). Fazio (1986) stated that the associations do not necessarily have to be true, but the perception of a certain stereotype is already enough for people to make a certain association without being even aware of them. These associations act outside their awareness and some people may also not be willing to admit to certain negative associations (e.g., racial stereotypes; Fazio & Olson, 2003). The cognitive structure functions on these associations. Consciously or not, people classify certain elements (e.g. stereotypes) based on the messages and they interpret from their surroundings (Zerubavel, 1997) and after their brain has classified this information, they react based on this cognitive process (Fazio, 1986; Zerubavel, 1997).

Gender too can be seen as cognitive structure through which we make sense of reality. Although gender for a long time was considered to be determined by biology (Kennelly, Merz & Lorber, 2001; Buikema & Van Der Tuin, 2009), this concept has changed into a broader definition. It is no longer something that was fixed by estrogen or testosterone, but the definition by Simone the Beauvoir was introduced and favored (Buikema & Van Der Tuin, 2009). Her point of view started with the idea that a person is not born within a certain gender but put by society into one of these two boxes and subsequently socialized to adapt to this classification. Consequently, there is a difference between sex and gender. Sex refers to biological characteristics and gender to socially constructed definitions pertaining to sex (Buikema & Van Der Tuin, 2009). Both the words and concepts of sex and gender themselves have different stereotypes. However, within this research the term gender has preference, since it is the most common way to describe people. This study does not revolve around the biological sex a person "has", but it all centers around the gender someone identifies with. How does this concept relate to traits and occupations then?

White and White (2006) stated that it was a popular belief that some occupations were more suitable for men while others were more stereotyped as being typically female occupations. Most often, the reasons for upholding this differentiation lies with the stereotyped traits and temperaments. There are traits that are often linked to masculinity or

femininity. This trait however, can at the same time also be linked or needed in a specific occupation. Different studies show that the ongoing thought processes and associations of these traits lead to the belief that some occupations require feminine traits, while others require more masculine traits – and these occupations themselves are thus perceived as either feminine or masculine.

To illustrate, nursing was not only an occupation, but also a trait that was perceived as feminine (Spence & Helmreich, 1978; Glick, Wilk & Perreault, 1995; White & White, 2006; Nelson, 2016). There were different explanations for this explicit stereotype. First of all, there were jobs that required certain personality traits that were more associated with one type of gender. For a nurse it seemed important to be caring. Women were perceived as being more caring due to their history in bearing and raising children. Following this stereotype, women were perceived as being more suitable to be nurses, and this idea extended to other caretaking occupations in general (Spence & Helmreich, 1978; White & White, 2006). Following the abovementioned idea, further reinforcement for the feminine stereotype of caretaking (jobs) followed. Since these traits were more associated with femininity, more women were encouraged to take on this kind of job and they got further overrepresented within the sector or work field. Women now predominate in nursing and this confirms the stereotype (Glick, Wilk & Perreault, 1995; White & White, 2006).

Whereas nursing is supposed to be more suitable for women, being sporty and physically active is a trait stereotypically associated with boys and men (Fredericks & Eccles, 2002; Hartmann-Tews & Pfister, 2003; Klomsten, Marsh & Skaalvik, 2005). The gendered stereotype of this trait is however, decreasing. Other traits and fields of work stereotyped as being male are inimical to the caretaking and mothering traits associated with females: business instinct and commerce (Nelson, 2016). These traits and associations led to males being perceived as more suitable for higher positions such as management functions that involved power and responsibility. Summarizing, women are perceived to be better caretakers, while males are supposed to be better at being responsible.

These examples of stereotyping show how culture as a cognitive approach leads to certain ideas that the larger part of society shares. Due to all sorts of classifications and retrieved from society and use within society, people have certain associations (e.g. women are more suitable nurses). These associations are precisely what we need to pin down, in order to see how they influence certain areas and create barriers.

2.4 Observing associations

To measure attitudes, it is necessary not only to know how people think about some of the occupations, but we want to know their deep-seated ideas about gender. Instead of looking at the outcome of these associations, this research wants to know what these

associations are and the thinking patterns that are at the base of these ideas. Since these associations are not (always) logical or factual, it is interesting to see what they are for the art sector and how they are influenced. Statements are often perceived as plausible but based on interpretations instead of empirical evidence. By pinning down these associations with an Implicit Association Test, this study tries to intertwine the associations with empirical research.

An association that is commonly or stereotypical – and thus easier to connect, will have a more rapid response. Moreover, a well-established or strong stereotype will give a larger effect. On the other side, if an association is weak, there will be a longer response time (White & White, 2006). The Implicit Association Test is especially useful since this study aims to research if the artworld, and the occupations it comprises, are gendered.

As mentioned earlier, this study will use two Implicit Association Tests. Implicit stereotypes are ingrained associations and the use of an implicit association tests makes it possible to study these associations that reflect continuing influences made by the past (White & White, 2006). These remaining influences of explicit beliefs are, although often consciously rejected or abandoned, a continuous ongoing influence to our cognitions and perception. An IAT assesses these implicit stereotypes by measuring the underlying associations with other concepts (White & White, 2006).

Looking at this issue with the help of implicit association tests, it is possible to say something about the earlier mentioned human capital theory for example. This theory would say that the artistic sector is accessible for women, but due to their careers breaks they are not able to reach to top. We want to know how people think and not what they say, this study does not want to research what the political correct answers of the participants are but focusses on the cognitive process that happens naturally. Implicit association tests make this possible. In modern society, stereotypes are more often questioned than before. A few generations earlier, it was not questionable that sport was a masculine area and nursing more feminine, but the current norms and values try to counteract these phenomena. This makes (gender) associations a relevant subject to research. Gender is no longer a justified excuse for inequality, disadvantages or success. By looking at the implicit associations, it becomes clear what exactly has been accepted as sexism for as long as we can remember.

2.5 Hypotheses

Based on the theory explained in this chapter there are some expectations regarding the extent to which professions within the art sector are associated with either masculinity or femininity. The first part of the research focusses on the associations of artistic and non-artistic professions. Occupations within the artworld have not been not been studied in particular before and it is difficult to say if it can be expected that these occupations are either

more masculine or feminine. Different theories and researchers show that both associations (male-artistic and female-artistic) could be justified. Wikberg (2013) argues that the school subject of art is strongly linked to femininity, whereas Kant (1790) argues that artistic genius is connected to the male sex. This paradox could be explained by the assumption that artistry itself is linked to femininity and when the element of success (or responsibility) comes into play, masculinity gets the upper hand in the association.

Becker (in Alexander, 2003, p. 79) approaches artistic creation and success differently than Kant (1790). Instead of giving the artistic genius all credit, Becker (2003) beliefs that creating art is not isolated to only one person. It takes a variety of people to create, however, he does agree that at the core of any artistic product, there is one person who is responsible for the creation of it. Implicit associations and responsibility are at the basis of the explicit ideas people have about status. It could be that the explicit judgements about status are consequences of the implicit associations made about responsibility. Since responsibility is more a more objective characteristics, it is more suitable for the Implicit Association Test.

There is less contrast when stating that some has status or not. It was chosen to use the term responsibility instead of status for the IAT. The IAT asks people to make associations as quickly as possible, therefore responsibility seemed as a more suitable term. Someone is either responsible in designing or creating an idea (director, author etc.) or only perform/execute what someone with responsibility asks them to.

Some jobs are perceived as more masculine then feminine (Polachek, 1975; England, 1982; Klomsten, Marsh & Skaalvik, 2005). The hypotheses expect that the occupations within the artistic field are easier linked to femininity, with the exception of masculine professions. However, the element of responsibility needs to be research more in-depth to see if and what sort of role this plays in gender associations. The differentiations are not only (or mainly) concerned with occupations being artistic or not, but it is expected that this depends on the level of responsibility of the occupations. It revolves around the occupations being perceived as being a high-status job or caregiving profession.

H1: Artistry (and therefore artistic occupations) is associated more with femininity than with masculinity.

H2: Success and responsibility (in the art sector and occupations as well) are associated more with masculinity.

Since people may not be willing to answer explicitly how they feel about certain occupations in relation to characteristics such as caretaking and status, the results of explicit

and implicit question may differ. By looking at the explicit associations people make about professions and their level of status and to what extent they are about caring for other people, it would be possible to see if these categories differ significantly. Earlier research suggests that occupations that have higher status are linked to men and occupations that are centered around caring for other people are associated with women. It is expected that this not different for the artistic sector. Implicit high scores – indicating the bias – will also mean higher scores on explicit level.

H3: Higher implicit biases on jobs perceived as masculine, will lead to higher explicit scores on job status

H4: Higher implicit biases on jobs perceived as feminine, will lead to higher explicit scores on caring for other people.

Chapter 3 will focus on how these hypotheses were tested and what measures were necessary to accept or reject the hypotheses in chapter four, before drawing any conclusion in the discussion chapter.

3. Method

3.1 Participants

Since this study (and corresponding hypotheses) focusses on two separate aspects of gendered associations within professions in the art sector, it relied on two different tests. However, the tests were conducted in the same pool of 120 people. The data for this research was collected via Mechanical Turk. This platform allows people to create and distribute small tasks – such as surveys – in exchange for a certain amount of payment. Mechanical Turk is a site by Amazon that has a diverse and large workforce that consists of more than 100.000 users (workers) from over 100 countries (Buhrmester, Kwang & Gosling, 2011). These workers complete tens of thousands of tasks on daily basis. The workers get paid for each of the tasks they are participating in. Among other things, this can be surveys, writing assignment or experiments (Buhrmester, Kwang & Gosling, 2011).

For this research, the participants were asked to participate in a short sorting task that would take about 10 minutes. American citizens earn, on average, 9 dollars per hour. Since this task would take approximately 10 minutes, the 9 dollars were divided by six which led to a reward of $1,50. The aim here being that by giving them a "fair" wage, the workers would take the time and effort to fill out the survey and IAT correctly and completely. Mechanical Turk makes it possible to filter the workers by specifying additional criteria. This research only used participants from the United States. Another criterion was that the workers are so-called "masters". The master qualification is granted by Mechanical Turk (Mechanical Turk, n.d.) to workers who have had high degrees of success while performing tasks over a wide range of requesters and tasks. Use of these workers therefore serves to assure that the survey was taken seriously by the workers.

In summary, this means that the 120 participants were workers from the United States that have been granted a master status and are therefore experienced participants in academic research. However, regarding the sampling procedures some biases were inevitable, because respondents are essentially self-selected. I will extensively report on distributions of background variables in the first part of the result section.

3.2 Materials

A primary tool to measure associations (e.g. racial stereotypes) is the Implicit Association Test (Carpenter, Pogacar, Pullig, Kouril, Aguilar, LaBouff, Isenberg & Chakroff, 2018). This method enables researchers to "*infer association from reaction times in a stimuli sorting task, providing a complement to self-report measures that sometimes offers dramatically different conclusions*" (Carpeter, et al., 2018, p. 3). The use of an IAT makes it possible to if people associate certain concepts or terms quicker with – in this case – a specific gender type. The concepts used in this study differed for the first (artistic) and second part

(responsibility). To study the gendered associations between artistic and non-artistic occupations, different stimuli were used for studying occupations only within the art sector that differ in terms of responsibility. While selecting the stimuli it was taken into account that the occupations were as gender neutral as possible. By way of illustration, instead of using the word nurse, which already seems to steer into the female direction, the word caretaker was chosen since this term seems to be less gendered. The first test used 20 stimuli: 10 artistic professions and 10 non-artistic professions. Within these two groups there were occupations of different levels: occupations with different degrees of responsibility or status. This eventually led to the division in Table 1.

Table 1: Stimuli IAT part 1

Artistic Occupations	**Non-Artistic Occupations**
Film Director	Lawyer
Architect	Surgeon
Choreographer	Professor
Orchestra Conductor	CEO
Author	Banker
Reality Star	Elementary School Teacher
Dancer	Sales Assistant
Art School Teacher	Social Worker
Make-up Artist	Caretaker
Directing Assistant	Receptionist

For the second part of study, only jobs within the art sector were included. This part of the research focussed on the associations of these occupations and level of responsibility. It was expected that jobs with more responsibility would be associated quicker with males and jobs with less responsibility with females. These criteria led to the stimuli listed in Table 2. These two tables portray the target stimuli. Besides target stimuli, an IAT also uses attribute stimuli. These stimuli are necessary to measure the associations. Since this study aimed to measure the associations between these occupations and gender, the attribute stimuli were based on gender. White and White (2006) for example used names of boys and girls to refer to either the male or female gender. However, names are getting increasingly gender fluent compared to 10 years ago. Therefore, it was chosen to use personal and possessive pronouns as well as *gendered* nouns belonging to either one of the genders. For women this meant that the following stimuli are used: girl, her, hers, lady, she, woman and women. For the male stimuli the male equivalents of the same words were used: boy, gentleman, he, him, his, man and men.

Table 2: Stimuli IAT part 2

Occupations with Responsibility	**Performing / Executive Occupations**
Film Director	Movie Star
Architect	Dancer
Choreographer	Art School Teacher
Orchestra Conductor	Directing Assistant
Author	Make-Up Artist
Fashion Designer	Guitar Player
Publishing Agent	Stage Hand
Theatre Producer	Tailor
Film Critic	Museum Employee
Movie Producer	Runway Model

Besides the IAT itself, the questionnaire also investigated some background information. First of all, the participants were asked to give some general information such as their age, gender and educational level. In order to see how these people related to the art sector itself, they were also asked if they worked in the art sector and how often they visited certain cultural activities. For these cultural activities the participants were also asked to indicate how interested they were in these topics by filling in a Likert-scale with (answer categories 1 to 7 – higher means more).

The final part of the survey related to the occupations that would reoccur in the IAT. The participants were asked to fill out two more Likert-scales based on their explicit associations. One where they needed to indicate to what extent (1-7) they categorized these occupations as caring for other people. In the second one, they were asked to indicate to what extent (1-7) they considered the job as being of high status.

3.3 Apparatus

Participation to the IAT required either a laptop or desktop. The IAT used the letters 'E' and 'I' on the keyboard to categorize the stimuli. Computers without a keyboard were therefore not sufficient enough and these devices were filtered out by showing an error when opening the survey on a non-compatible device. Participants were asked to respond as quickly as possible and, at the same time, make as little mistakes as possible.

The program used to develop these IAT´s was iatgen. Iatgen is not a tool which enables you to run an IAT, but it is a method that allows you to create an IAT and later on copy/paste it into another platform of your preference. For this study it was chosen to use Qualtrics. Qualtrics enables you to place JavaScript and HTML files into the program and therefore becomes a platform to carry out an IAT research (Carpenter, et al., 2018). Since this research used two different IAT's, it was chosen to create a so-called "master survey". This

survey contained no content other than a randomizer that randomly forwarded the participant to either one of the IAT's within this study. The randomizer took into account that the number of participants assigned to two IAT's would be comparable.

3.4 Procedure

The participants would log into Mechanical Turk and were able to select the task created for this study. Before starting the task, they were able to see the approximation of time it would take to complete the task and what the reward was for completing the entire task. They were also made aware that this test could only be made on a desktop or laptop and that other devices would not suffice. This information contained a short description of how to finish the task correctly in order to get paid. It was necessary to complete the task in one go and to copy-paste a randomly generated code given at the end of the questionnaire to receive payment. This random code was a way to check if the respondent had in fact completed the entire questionnaire.

After being redirected from Mechanical Turk to the Qualtrics-environment via a hyperlink, the questionnaire itself started with the demographic survey questions. Also included in this part of the survey were multiple Liker-scale question. In order to focus on the characteristics of the artistic occupations, this research also looked at the explicit associations of the participants. In doing so, the participants were asked to rate the jobs based on two characteristics: caretaking and status. This also demarcated if the implicit associations influenced the explicit ones. It was expected that the participants were faster inclined to give political correct answers when asking them explicitly to what extent they valued an occupation as caretaking or status. Where the IAT focused on responsibility as a characteristic, the part where we asked the participants explicitly about their attitudes towards the occupations was focused on status.

The first part of an IAT involved sorting words in one of two categories as a way of getting used to the stimuli. For this test the participants needed to first make distinction between male and female related words. Then, depending on which of the two tests the participant was guided to, they were asked to sort out occupations. This could either be between the categories artistic and non- artistic or responsibility and performing/executive. Not only were participants randomly assigned to one of the two tests, within these tests they were again randomly assigned to one specific version out of four possibilities. This was important because the test hereby made a differentiation of which words started out on the left or right side of the screen and what categories came first. Version one would for example start with male on the left and female on the right, whereas version two started with female on the left and male on the right.

By performing this IAT, and as mentioned in the introduction, it became possible to measure someone's mental associations that are compatible with the pairing tasks they perform in the IAT. For example, if a participant found artistic occupations more suitable for women, it was likely that this person would respond more rapidly when *female* and *artistic* occupations are paired at one side of the screen (e.g. the left block in figure 1., "compatible block"). This person on the other hand, would have slower responses or more mistakes when the pairing was mixed up (female and non-artistic or male and artistic, e.g. the right block in figure 1., "incompatible block"). By letting the participants complete seven trials, they would undergo both conditions. If they were faster with one of these conditions, their associations of one condition was relatively higher than for the other condition (Hofmann, et al. 2005; Carpenter, et. al, 2018).

The IAT that measured these associations asked the participant to sort the words as quickly as possible. They were able to start the test by pressing the space bar. The participant saw a stimulus in the middle of the screen. This stimulus was a representative of the targets/categories on the left (e.g. *female* or *artistic*) or right (e.g. *male* or *non-artistic*) side of the screen. By pressing on of the two keys (the 'E' key for left or the 'I' key for right) with the designated hand (e.g. left for *female* or *artistic*; right for *male* or *non-artistic*), the participants were able to sort the stimulus while the computers measured the response time of this task. The place and combination of the targets varied for the different blocks, but this was clearly portrayed in the upper left and right corners of the screen as visible in figure 1.

In case of mistakes (pressing the wrong key, thus assigning a word to the wrong target), an X was displayed on the screen. The participants were forced to correct their mistakes by pressing the correct key. The IAT exists out of seven block of stimuli sorting trials.

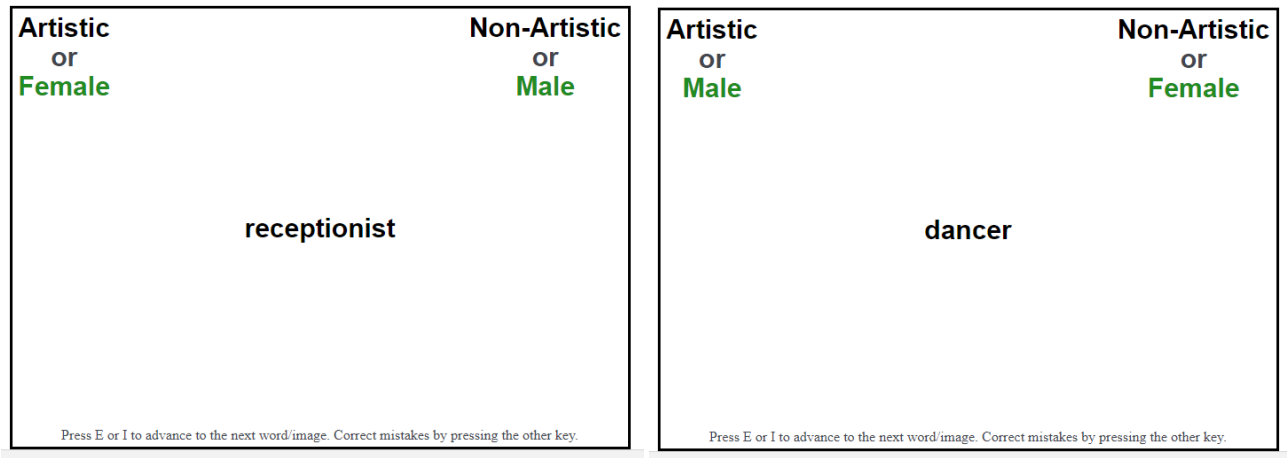

Figure 1: Example look of the IAT

Completing only the IAT within this study would take approximately 5 minutes. As mentioned before, the IAT consisted of seven blocks, which were designed as follows: The first and second block were practice blocks of 20 words each. The first block for example could give 20 stimuli that needed to be sorted between *male* and *female* and for the second block, 20 stimuli needed sorting between *non-artistic* and *artistic* occupations. Following on these practice blocks was a combined, third block. This was, depending on the targets on the left and right, either compatible or incompatible. This was randomized, so all possible combinations and orders were presented to the complete group of participants and they were randomly assigned to one option. The third block had 20 practice stimuli. The fourth block had the same targets, but more stimuli (40 in total) since this was the critical block. Block five was then again, a practice block that existed out of one target but the sides were now reversed in comparison to block 1 or 2. After this block, the participants completed again 2 combined blocks (block 6 with 20 stimulus and block 7 with 40 stimulus) where the targets were in reversed positions, with block seven being the critical one. For the analysis of these data, the response time and errors of the combined blocks were used (block 3 + 4 and block 6 + 7).

3.5 Design: measure hypotheses

The data collected over these different blocks was assembled in Qualtrics. IATgen, an online web app was then used to convert the data into different statistical results. One of the results was the difference score (D-score), that was calculated for each of the individual participants. The score indicated in which condition the participant was faster. There are no associations between target and stimulus when the D-score is zero (0). A positive D-score means that an individual participant has stronger associations (was faster to respond) in the compatible blocks (e.g. *female* and *artistic*). A negative score on the other hand, shows that s/he was faster in sorting the incompatible blocks (e.g. *male* and *artistic*). The combination of the D-scores and a variation of statistical tests showed if the hypotheses could be accepted.

While performing an IAT, a few other elements are important when analyzing. IATgen has an analyze function that measures these important elements. It portrays the number of participants, it filters out participants who were taking excessively long or short to respond. Someone who takes too long may not be focusing on the test completely and someone whose reaction speed is really fast, may just be pressing buttons instead of looking at the words and "deciding" how to divide them. Besides these drop-outs, it also gives an error-rate which indicates the proportion of trials in which erroneous response occurred. IATgen also makes it possible to measure the internal reliability of the IAT's. By measuring this reliability with use of split-half with Spearman-Brown correction, which is partly dependent on the number of items, it shows if words within specific categories have equivalent results and if the

categorization used was clear for the participants (Towers & Allen, 2009; Carpenter, et. al, 2018).

Then, there are a few statistical analyses such as the *t*-test, a 95% of confidence interval and the Cohen's *d*. These scores were all measured based on the mean and standard deviation of the D-score. Additionally, it was assessed to which extent individual D-scores were accounted for by the background variables. This was tested through linear regression analyses in the Statistical Package for the Social Sciences (SPSS). These regression analyses were performed twice, as were the other tests, for the two distinct IAT's with different participants. Other measures used to test the hypotheses were correlations and paired samples t-tests.

4. Results

4.1 IAT 1: artistic versus non-artistic occupations

The first IAT and accompanying survey about artistic jobs versus non-artistic jobs, was taken by 60 participants. All of the participants finished the complete survey and therefore there are no missing's in the data collection. The participants were asked to fill in their year of birth. Later on in SPSS this was transformed into age. The age of the participants ranged from 24 to 57. On average, the participants were 38,58 years of age. 60% of the participants were male and the other 40% described their gender as being female. Slightly more than half of the sample (51,7%) had obtained a bachelor's degree or higher. 35 percent obtained a high school degree or equivalent, such as a GED (General Education Development). The remaining 13,3 percent had obtained an associate's degree.

Out of the 60 participants, four mentioned that they were professionally involved in the art and culture sector by either their work or studies. The occupations specified included a musician, a fine arts artist, a web developer/graphic designer and a painter. Another part of the participants characteristics focused on their involvement in the arts and culture sector. Table 3 shows for eight artforms how interested people are. 1 indicates that they are totally not interested in this artform, and 7 suggests that they are very much interested. Based on these Likert-scales, the participants were mostly interested in film ($\bar{x}$ = 5.62) and least interested in dance ($\bar{x}$ = 2.80).

Table 3: Interest in art and culture sector in percentages (N=60)

	Mean	**SD**
Architecture	3.75	1.61
Visual Arts (painting, sculpture, photography)	4.53	1.68
Classical music / opera	3.12	1.74
Theater	3.33	1.79
Dance	2.80	1.74
Popular Music	4.60	1.79
Film	5.62	1.39
Performing Arts	3.95	1.61

Figure 2 gives an overview of how often the participants had visited these cultural activities in the last 12 months. Cinema was the most popular cultural activity, 25,37% of the participants visited 6 times or more over the last 12 months. Least popular were dance performances, 80,6% of the people did not visit this activity.

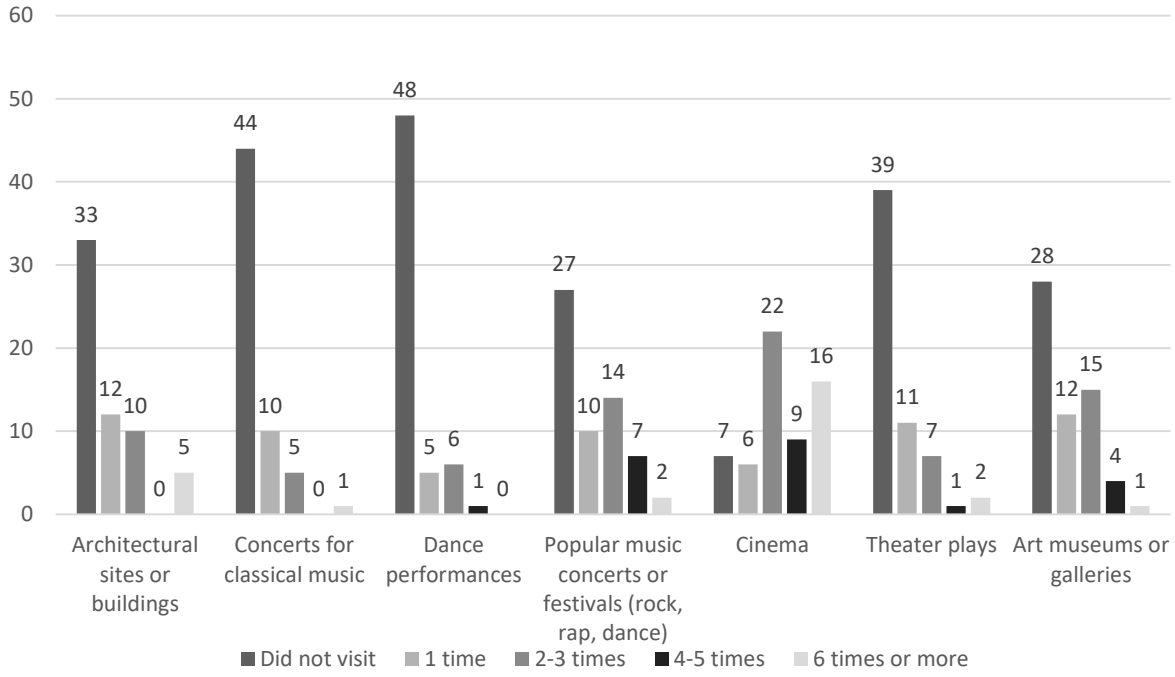

Figure 2: Number of visits over the last 12 months

The final part of the survey included two more Likert-scale questions. The first scale asked to what extent the participants thought the jobs (which were also to be presented in the IAT) were about caring for other people. 1 meant not caring at all and 7 entirely about caring. The jobs were randomized for each of the participants, avoiding effects of sequence. Table 5 shows for each of the occupations used in the first IAT the perception of these jobs when thinking about caring for other people. Based on the means, it becomes visible that the jobs perceived as least caring are movie stars, dancers and authors. Occupations that are perceived as having a high level of caring are elementary school teachers, social workers and caretakers.

The second Likert-scale had the same setup, but instead of caring for others, it enquired about job status. The participants were asked to indicate to what extent they perceived the jobs as being of high status. 1 meant no status at all and 7 stood for the highest status possible. The occupations with the lowest perceived status are sales assistant, caretakers and receptionists. The jobs with highest perceived status are: surgeons, CEO's and movie stars.

After analyzing the demographics and characteristics of this group of participants, the analyses will now focus on the results from the IAT itself. The data was first analyzed with IATgen. We looked specifically if artistic occupations were associated easier with women than with men. To check whether or not the IAT was reliable, I established the estimated internal consistency of the IAT, based on split-half with Spearman-Brown correction. The first IAT scored a .87 and is therefore reliable.

Table 4: Perception of occupations based on a seven-point Likert- scale indicating the level of caring for other people and the level of job status

	Caring for other people		***Job Status***	
	mean	*SD*	*mean*	*SD*
Lawyer	3.93	1.71	5.78	1.28
Surgeon	5.98	1.37	6.5	0.83
Professor	4.73	1.60	4.92	1.47
Banker	2.73	1.41	4.78	1.40
CEO	2.55	1.57	6.65	0.69
Sales assistant	3.87	1.62	2.00	1.09
Elementary school teacher	6.28	0.94	2.47	1.24
Caretaker	6.35	1.33	2.23	1.35
Social worker	6.47	1.00	2.38	1.41
Film director	2.88	1.49	6.08	1.15
Receptionist	4.10	1.59	1.83	0.89
Architect	3.18	1.55	5.38	1.24
Choreographer	3.27	1.35	3.88	1.42
Orchestra conductor	3.03	1.64	4.88	1.31
Author	2.65	1.60	4.90	1.41
Movie star	2.07	1.31	6.65	0.84
Dancer	2.60	1.58	3.42	1.36
Art school teacher	5.32	1.48	2.73	1.46
Make-up artist	4.02	1.70	2.60	1.53
Directing assistant	3.55	1.68	3.55	1.65

Secondly the D-score mean was calculated, which indicates if there is a cognitive bias. It was expected that females were associated quicker with artistic occupations and males with non-artistic occupations. The D-score mean for the first IAT here is 0.159 and indicates that the associations is indeed as expected. For this test it means that there was an association of men with non-artistic professions and women with artistic professions. Performing a *t* -test makes it clear if this bias is significant or not. The *t*-test for the bias between gender and artistic jobs was 3.25 with a p-value of 0.002 indicating that this bias is significant at alpha=0.01. Cohen's *d* shows the size of the effect, in this case the effect being the strength of a bias between two groups. For this IAT the Cohen's *d* is 0.43, which indicates that the effect is of medium magnitude. This score is computed by the differences in means divided by the standard deviation of the D-score. It is quite similar to the D-score, however not exactly the same since the D-score takes other elements in its calculation (Greenwald, Banaji & Nosek, 2003, p.201).

Besides the D-score and Cohen's *d*, other statistical tests are used to see which factors lead to this effect. By doing a regression analysis, this study aims to see whether the before mentioned demographics can explain the cognitive bias. The variables used in this regression analysis are the participants' age, their gender, educational background and their professional involvement in the arts. Since this study is concerned with gender stereotyping, it can be plausible that there are differences in these stereotypes of men or women. The same goes for age and educational level. Someone who is older, may have a different worldview than a person being raised in a more modern society. As mentioned in the theory section, people from earlier generation were used to certain stereotypes. Current generations are being introduced to stereotypes as problematic and stigma's being broken. Someone who joined a high level of education is, according to Lick, Alter and Freeman (2018), are more at risk of stereotyping others than someone with a lower education background.

Before performing this statistical test, the variables gender and professional involvement in the arts are recoded into dummy variables. For gender 0 indicates the participant being male and 1 indicates being female. A score of 0 for professional involvement indicates the person not being involved in the art sector and a score of 1 indicates involvement. Looking at the *f*-test of .596 with a significance of .667, this model is not significant in explaining the D-scores. This was also apparent from the very low adjusted R^2 of -0.33. The variables age, gender, educational background and professional involvement in the arts had very little contribution in explaining the bias – D-scores. According to the results of the IAT there is bias, but since none of the above-mentioned variables is significant, it means that this bias is generally imbedded in our culture.

Before participating in the IAT, the participants already saw the occupations in two different seven-point Likert-scales about the level of care and status involved. Table 5 portrays the means and standard deviations of these scales, sub-divided by whether the occupations are artistic or non-artistic. This shows that on average, the participants scored non-artistic occupations ($\bar{x}$ = 4.70) as more caring than artistic occupations ($\bar{x}$ = 3.34). A paired-samples *t*-test compares the means of these variables and tests if they are significant. Both artistic and non-artistic occupations (p=.000) were significant in relation to caring for other people. There is a significant difference between the means of these two variables and it can be expected that they are influenced. High status however, was more associated with artistic occupations ($\bar{x}$ = 4.40) than with non-artistic occupations ($\bar{x}$ = 4.00). A *t*-test indicates that these pairs of variables differed significant as well (p=.000). By looking closer at the means for each of the professions as portrayed in table 4, these results are confirmed. Movie stars and film directors both score higher than a six on the scale of seven. Thereby, they are in the top 3 of occupations with the highest status.

Table 5: Means of Likert-scales divided between artistic and non-artistic occupations

	Caring for other People		**Job Status**	
	Mean	*SD*	*Mean*	*SD*
Non-Artistic Occupations	4.70	0.86	4.0	0.65
Artistic Occupations	3.34	1.17	4.4	0.64

To analyze if the implicit associations (D-scores) are of influence on the explicit associations, four more regression analysis were needed. Each of these analyses included one the four variables as portrayed in table 5 to see if there was a causal relation with the D-scores. It was expected that more bias would lead to a different explicit score of caring for other people and job status. Non-artistic professions (R^2 = .047, p = .122) and artistic professions (R^2 = .005, p = .636) on caring for other people were both not significantly influenced by the D-scores. Job status, divided by non-artistic occupations (R^2 = .040, p = .156) and artistic occupations (R^2 = .017, p = .353), also showed no significant influence on the bias. An explanation for these results suggests that the bias is eliminated in answering the explicit questions. Due to political correctness, people may not be completely honest while filling in the Likert-scales.

Another division in the jobs was made. Instead of making the division between artistic and non-artistic occupations, this time the occupations are divided based on what could be perceived as gendered traits. The jobs are either perceived as masculine (lawyer, surgeon, professor, CEO, banker, film director, architect, choreographer, orchestra conductor and author) or feminine (elementary school teacher, sales assistant, social worker, caretaker, receptionist, movie star, dancer, art school teacher, make-up artist and directing assistant). The mean of this new categorization of occupations is visible in the table below.

Table 6: Means of Likert-scales divided between masculine and feminine occupations

	Caring for other people		**Job Status**	
	Mean	*SD*	*Mean*	*SD*
Masculine	3.50	1.06	5.38	0.64
Feminine	4.46	0.86	2.99	0.79

Table 6 shows that the job status of masculine occupations ($\bar{x}$ = 5.38) is rated higher than the job status of feminine occupations ($\bar{x}$ = 2.99). The means of these pairs differed significantly (p=.000). The means concerning caring for other people differed significantly for masculine and feminine professions. Although the difference in mean is smaller than for job status, there is a preference for feminine occupations ($\bar{x}$ =4.46) when it comes to the aspect of caring for other people in comparison to masculine occupations ($\bar{x}$ = 3.50). This difference was tested as significant (p=.000). There is a difference in means of masculine and

feminine occupations for job status. To test if these differences had significant influences on the bias (D-scores), yet another four regression analyses were conducted. For each of the variables in table 6, it was determined if they influenced the bias. Jobs perceived as masculine on job status turned out significant (R^2 = .085, p = .036). This indicates that when people who have a larger bias (higher D-score) also were likely to score masculine profession as higher status jobs. Feminine jobs on job status however was not influenced by the bias significantly (R^2 = .001, p = .801). Finally, caring for other people for both feminine (R^2 = .002, p = .756) and masculine (R^2 = .045, p = .132) occupations did not show any significance, indicating they were influenced by the D-scores.

4.2 IAT 2: Characteristics of artistic occupations

For the second part of this study, focusing on responsibility and gender, the same demographics and characteristics were collected. This IAT and accompanying survey was filled in by 60 people, 42 of whom were men (68,9%), the remaining participants identified themselves as woman. Their age ranged from 23 to 69. On average, the participants were 38 years of age. 39,3% hold a diploma of a high school degree or equivalent such as a GED. 13,1% holds an associate's degree and 47,6% obtained a degree equal to or higher than a bachelor's degree.

Only one of the participants of this second part of the research mentioned their involvement in the arts and cultural sector on a professional level. This was a musician. Again, these background questions also looked for the involvement in activities within the arts and culture sector. Table 7 portrays to what extent people are interested in these forms of art. Equal to the first study, film is the most popular category. Least popular is dance the larger part of the participants were not interested in this art form. Figure 3 shows how often the participants visited these art activities over the last 12 months. Again, cinema is most popular and dance the least. The largest part of the participants did not visit any dance performances over the last 12 months.

The second Likert-scale had the same division of 1 to 7. And again, for this scale, 1 represented the occupations having no status at all and 7 referred to the highest status possible. The means of these occupations on the Likert-scale showed that the occupations stage hand, museum employee and art school teacher scored lowest in level of status. The highest status occupations according to the participants were movie star, film director and movie producer.

Table 7: Interest in art and culture sector (N= 60)

	Mean	SD
Architecture	3.31	1.72
Visual Arts (painting, sculpture, photography)	4.02	1.74
Classical music / opera	2.67	1.77
Theater	3.13	1.9
Dance	2.59	1.67
Popular Music	4.79	1.70
Film	5.07	1.72
Performing Arts	3.54	1.77

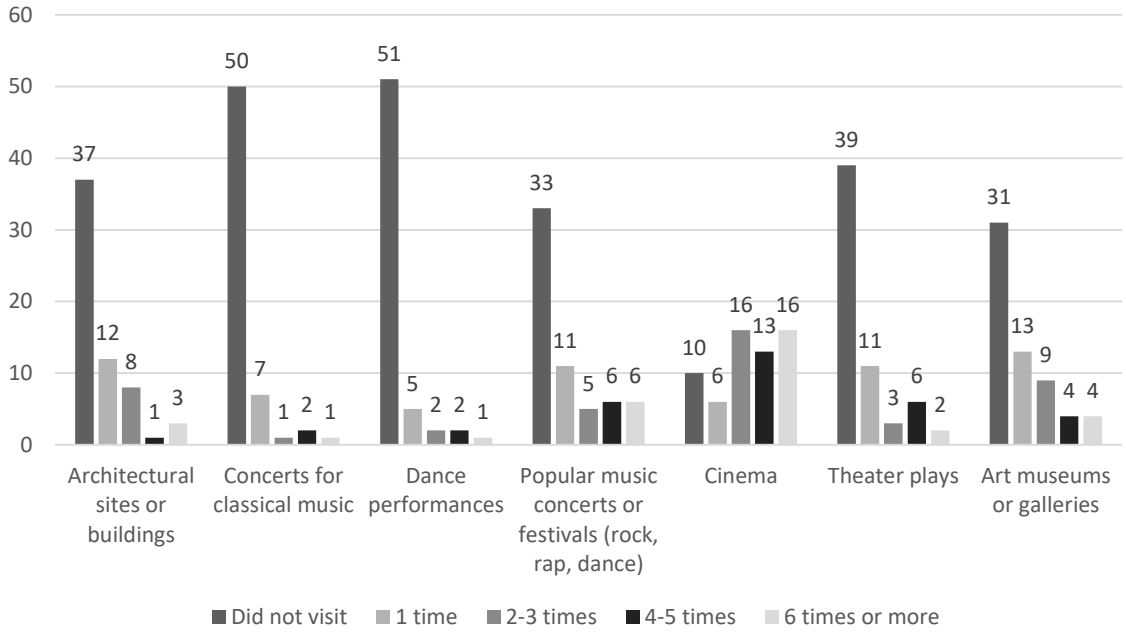

Figure 3: Amount of visit over the last 12 months

As mentioned earlier, the occupations on these Likert-scales were also used in the IAT. Within the IAT a division was made between these 20 occupations based on their assumed responsibility. One category had occupations that were expected to be of high responsibility and the other category included 10 occupations that were more associated with lower levels of responsibility due to their executive or performing level. The mean of the first 10 occupations (architect, author, choreographer, fashion designer, film critic, film director, movie producer, orchestra conductor, publishing agent and theater producer) on status is 5.10 on a scale of 7. A paired-samples *t*-test shows that the means of both masculine and feminine professions on caring for other people differ significantly (p=.005). This suggest

that it is statistically proven that people explicitly associated jobs that involve caring with other people stronger with femininity than with masculinity.

Table 7: Perception of occupations based on a seven-point Likert-scale indicating the level of caring for other people and job status.

	Caring for other people		***Job Status***	
	Mean	*SD*	*Mean*	*SD*
Architect	3.52	1.72	5.32	1.16
Author	3.49	1.77	5.62	1.11
Choreographer	3.61	1.46	4.41	1.19
Fashion designer	3.74	1.87	5.66	0.87
Film critic	2.74	1.61	4.28	1.29
Film director	3.13	1.48	6.13	1.09
Movie producer	3.02	1.55	5.99	0.89
Orchestra conductor	3.44	1.56	4.93	1.25
Publishing agent	3.59	1.57	4.28	1.34
Theater producer	3.44	1.47	4.82	1.24
Art school teacher	5.39	1.62	2.94	1.20
Dancer	2.84	1.43	3.93	1.40
Directing assistant	3.85	1.71	3.44	1.40
Guitar player	2.90	1.50	4.12	1.46
Make-up artist	4.36	1.53	3.15	1.31
Movie star	2.30	1.34	6.43	0.97
Museum employee	3.84	1.68	2.15	1.06
Runway model	2.05	1.42	5.62	1.38
Stage hand	3.69	1.64	2.03	1.19
Tailor	4.52	1.46	3.00	1.40

The second category (art school teacher, dancer, directing assistant, guitar player, make-up artist, movie star, museum employee, runway model, stage hand and tailor) scored a 3.68 on average on a scale of 7. This indicates that on average, the jobs labeled as having higher responsibility are explicitly valued as having higher status than those labeled as lower status and more of performing or executive earth. Another test was conducted to see if these differences in means were significant. The means of the variable job status were also statistically proven to be significantly different (p=.000). People tend to give jobs that are perceived as masculine, higher job status.

Whereas the first IAT focused on the associations of occupations to either the artistic sector or non-artistic sector, this second part of this study focused on jobs within the arts and

culture industry only. The variables for this IAT were divided into occupations with and without responsibility. I performed a reliability test based on the estimated internal consistency of this IAT. Again, this was based on split-half with Spearman-Brown correction. The reliability for the second IAT was lower than for the first part and only scored a .54 score. This means that the research is not as reliable as the first IAT. This will most likely be due to the choice of words/occupations. This internal reliability refers to the mistakes made by the participants in ordering the words. A lower reliability indicates that there were words in the research that were perceived as difficult or not logical in placing them in one of the two categories. Summarizing, this means that the participants had more trouble with the division made beforehand of which occupations were perceived as responsible. To some extent, this is explainable. The concept of responsibility is more dubious than determining if an occupation is artistic or not.

The second important result of the analysis is the mean of the D-score. For the second part of this research, this mean indicates if there is a bias, people have certain associations about the occupations and responsibility. It was expected that responsibility would be associated quicker with masculinity and executive/performing quicker with femininity. The D-score is 0.119 and indeed indicated that there is positive bias in this expected. This means that the participants associate the artistic occupations with higher responsibility more easily with males than with females and that occupations of a more executive and performing nature are quicker associated with women instead of men. The *f*-test gives a value of 3.08 (p= .003), indicating that this bias is significant. Both for the first IAT as for this IAT, Cohen's d (0.40) indicates a small to medium size effect.

Another regression analysis is necessary to see if and to what extent the background variables were of influence in this bias. The background variables, as described earlier, were age, gender, educational background and involvement in the art sector. Again, within this dataset the variables gender and involvement in the art were first transformed into dummy variables (categories 0 and 1) before performing the linear regression analysis in SPSS. Age, gender, educational background and involvement in the art were all not significant in determining the D-scores for this second IAT. Not surprisingly, this model showed an adjusted R^2 of -.017 (F=.756, p=.558). This means that this model does not explain the differences in D-scores. Furthermore, it indicates that the association of responsible occupations with men and executive/performing occupations with women is not only part of a specific group. It is not dependent on age, gender, educational level or involvement in the art. The associations are broader than the barriers and division of these variables.

This group of participants also filled in a pair of Likert-scales. Since this group was only presented with occupations from within the art sector, it is not necessary to make a division between artistic and non-artistic occupations. However, there is a division made

between occupations expected to be perceived as more masculine (film director, architect, choreographer, orchestra conductor, author, movie producer, fashion designer, publishing agent, theater producer, film critic) and those perceived as more feminine (movie star, dancer, art school teacher, make-up artist, directing assistant, guitar player, stage hand, tailor, museum employee & runway model). This was done for both the scale about caring for other people and for the scale on job status and the means are visible in table 10.

Table 10: Means of Likert-scales divided between masculine and feminine occupations

	Caring for other people	**Job Status**
Masculine	3.37	5.10
Feminine	3.57	3.67

Based on the results in table 10 there are already a few things noticeable. First of all, there is little difference in the mean about caring for other people between masculine and feminine occupations. This is comprehensible since the first IAT showed that artistic professions are perceived as less caring in comparison with non-artistic occupations. Second, job status scored highest for the masculine occupations. To see if these implicit associations were of influence in the Likert-scales and therefor explicit associations, another four regression analysis is performed. All four of the regression analysis – the scores of masculine occupations on caring for other people (R^2 = .085, p = .036), the scores of feminine occupations on caring for other people, the scores job status from masculine professions and the scores of job status on feminine professions – did not show any significance. This indicates that they did not influence the bias (D-scores). As mentioned in the results of the first IAT, it could be possible that people (intentionally or not) avoid giving honest answers in order to stay political correct about biases.

Within this second IAT, the internal reliability was lower than for the first IAT. When looking deeper into this, it became clear that during the first blocks of the IAT, already a lot of mistakes were made. In these specific blocks, the participants only needed to make a differentiation between *responsible* and *executive/performing* or *males* and *females*. By looking at the mistakes made in the phase of the research, it becomes visible that the participants already had trouble determining whether or not an occupation was characterized as either *responsible* or *executive/performing*. This indicates that the occupations used were perhaps not intuitive or unambiguous for the participants, even though they were selected carefully. To check the validity of the results, the mistakes were put in perspective. Although it is not common in IAT's to leave out stimuli after a test is performed, I have done so anyway to see whether or not the most confusing had a disproportionately large impact on the D-scores and thus lead to analytical issues. There were 60 participants and therefor it was

chosen to leave out the words that were wrongly categorized in the first block by more than half of the participants. The words thus left out were: fashion designer, art school teacher and museum employee.

The complete IAT showed a D-score of 0.119 and a p-value of .003. After removing the abovementioned three stimulus, the D-score was 0.127 with a p-value of 0.002. There are only small differences in the scores and both are significant. Since the results are not that much higher, this leads to the conclusion for the participants there was a lot of uncertainty about many more of the words. If other words were to be included that were less ambiguous, these results are expected to show larger biases. In turn, this may also have affected the follow-up analyses.

5. Discussion and conclusion

This study delved into the question to what extent there is a gendered stereotype when looking at occupations within the art sector. Different studies have shown that there is a large underrepresentation of females in certain areas of work (e.g. painters) and that leads to a barrier when entering the field. However, it was not studied empirically if these unequal divisions were being upheld through implicit social norms. By doing implicit research, it was possible to look at the underlying biases people have in the associations of occupations with gender. It was expected that artistic occupations would be associated quicker with females instead of males.

This hypothesis was confirmed by analyzing the results of the first implicit association test including occupations of both an artistic and a non-artistic nature. The participants were quicker in the compatible blocks of the test, meaning that they had less trouble associating artistic occupations with females and non-artistic occupations with males. This also means that they were slower in the incompatible blocks, where they needed to categorize artistic occupations with a male target and non-artistic occupations with a female target. By performing different analyses based on the demographics of these participants, this study tried to pin down the differences that were of any influence on the D-score. Gender, age and educational background and professional involvement in the art sector did not have a significant influence on differences in D-scores. In conclusion this means that the stereotyping of females in artistic occupations and males in non-artistic occupations was not different for people of different genders, ages, educational backgrounds or their knowledge of the art world due to their profession. The insignificant results are very interesting in this case. It seems that this association is thus general among the larger part of society. On this level, people associate similar, regardless of their social characteristics. Even artistic occupations that are expected to have a lot of status, are perceived as feminine.

The second hypothesis was concerned with the amount of responsibility within artistic professions and their association to masculinity. It was expected that occupations with an element of responsibility were associated more with masculinity than with femininity. The second IAT also showed a positive bias, meaning that, although not really strong, people did associate the suggested professions that were characterized as being responsible with men. Occupations of a more executive or performing level were quicker associated with femininity.

The third and fourth hypothesis were more concerned with the influence of the D-scores on the explicit associations. It was expected that a larger bias would also indicate higher gendered associations. The only significant result here was that people with higher biases in the first IAT (non-artistic with masculinity and artistic with femininity) were also more likely to score masculine professions as jobs with a higher status level. Where the third

hypothesis was confirmed, the fourth was not. There was no evidence suggesting that higher biases in the IAT led to higher explicit scores on caring for other people.

A major limitation of this study concerns the words chosen within the implicit association tests. The words were chosen based on their neutral characteristics. Words that already indicated a specific gender or were strongly associated with this gender (e.g. nurses) were left out. However, after the research, especially the second IAT, it became clear that the professions were not as clearly identifiable as intended. Some of the participants added a comment at the end of the survey indicating that the classification of some of the words was difficult or that they would have liked more explanation or practice before sorting the words within the IAT. It was explicitly chosen to not give the participants the "correct" associations beforehand. By giving them the time to familiarize themselves with these associations, it would become difficult to see to what extent their associations were implicit and thereby biased. As for the part of being able to practice the test, by doing seven blocks of different stimuli and letting the participants practice in several blocks before carrying out the critical block, they were already practicing. This was however not communicated with the participants. They were not able to tell based on which blocks the results of the IAT's were calculated.

They however, did see the occupations beforehand in the questions with Likert-scales. It was already described earlier on, but to stress the importance, the Likert-scale that explicitly asked about the associations of the occupations used a different term than the second IAT did. It was expected that the term *responsibility* would raise less questions in an association test than a term such as status or power. Make-up artists that work in Hollywood for example, do have status, but are often not responsible for the ideas behind the execution. To avoid such confusion, the term responsibility was chosen. It was expected that it would be clearer who would be responsible in his or her work. However, as some of the participants mentioned in the comment and suggestion section, they found this term difficult to interpret. For further research, it would be advisable to firstly conduct a general research into the titles of the occupations and their characteristics. If the words used in this study were tested before to see if they were in fact perceived as responsible or easier viewed as being of executive nature, some of these troubles might have been prevented.

The main expectations were confirmed. Artistry is certainly linked to femininity, but moreover responsibility and status are perceived as a masculine characteristic. The ideas by Kant dating back to the seventeenth century seem to be outdated. But to certain extent he did have a point. Maybe his ideas were not as characteristic for the art sector specific, but the stereotype is applicable to a larger field. How is then helpful for the arts and culture sector? Conducting this research does not influence the barrier for entering certain professions. And is there a barrier for women across different fields as well? Maybe there are work fields that

have a lower entry and where women can climb the ladder higher - through the glass ceiling, just as quickly as men.

Gender inequality, and moreover discrimination against females has been a hot topic for a longer time now. With the Weinstein affaire for example, a lot of attention was raised towards female actresses. One by one, they were lining up and came forward with their stories on how they were sexual assaulted by Weinstein. These women were all (successful) actresses but were still depended on the opinion of a powerful male figure – in this case Weinstein. In contrast to what happened to these women when making name for themselves, their fame also made it possible to make a statement and achieve, to what extent this is possible, some justice. This all led to his arrest on charges of rape, criminal sex act, sex abuse and sexual misconduct. These women used their status to let their voices be heard. They were able to break Weinstein's image and with the movement that followed, they achieved a real social change. Females from all over the world now dare to come forward and stand up for themselves. Of course, this is a great example of how these famous females made such a big difference in society. However, it may very well be that the only reason why they were able to start this movement was their fame. Unfortunately, there are still lots of women not in such a position of power. Examples such as the Weinstein affair show how important it is that females are just as well in positions of power.

Most of modern-day people fight the idea that men have a head-start at birth as a result of their gender. Moreover, a lot of media attention is focused on finding reasons behind gender inequalities in order to change the current culture. Different movements, such as the #metoo, show that gender inequality is something that involves both men and women. This research even suggests that these deeply-seated ideas are as much present in women as they are in men. B tackling this issue together, the stereotyping may decrease and the amount of successful female artists hopefully increases. The associations that are embedded in our culture, are also our responsibility. As much for the gentle women as for the genius men.

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Appendix 1: IAT I

Artistic vs. Non-Artistic Jobs and Gender

Q31 The survey software has detected that you are attempting to take this survey from an incompatible device. The survey contains questions that will only function correctly on a computer with a keyboard. Please open this survey from a computer with a keyboard.

Q35
Hello,

We are conducting a study about jobs. Instead of a long questionnaire, this survey contains a little game. After a few background questions, everything about the game will be explained. Participating to this survey should take no more than 10 minutes of your time and it would help us a lot.

We should stress that it is important that you finish the entire survey in one go. At the end you will be given a unique survey code which you can insert in Mechanical Turk to validate your participation and receive payment.

We should emphasize that this survey is strictly scientific and will not be used for commercial purposes. Your answers are entirely anonymous and will not be shared with third parties.

By pressing the arrow button below, you agree to participating to this survey under the these conditions.

Thank you very much for participating in this research!

Q37 In which year were you born (please scroll down to select the appropriate answer)?

▼ 2005 (1) ... 1941 (65)

Q39 What is your sex/gender?

- ○ Male (1)
- ○ Female (2)
- ○ Other, please specify (3) _____

Q41 What is the highest level of education of which you hold a diploma (excluding education in which you have participated, but not obtained a degree)?

- ○ No formal education (1)
- ○ Less than a high school diploma (2)
- ○ High school degree or equivalant (e.g. GED) (3)
- ○ Associates degree (e.g. AA, AS) (4)
- ○ Bachelor's degree e.g. (BA, BS) (5)
- ○ Masters degree (e.g. MA, MS, MEd) (6)
- ○ Professional degree (e.g. MD, DDS, DVM) (7)
- ○ Doctorate (8)

Q43 What is the highest level of education you have participated in (even if you did not obtain a diploma) or in which you are currently enrolled (in case you are a student)?

- ○ No formal education (1)
- ○ Less than a high school diploma (2)
- ○ High school degree or equivalant (e.g. GED) (3)
- ○ Associates degree (e.g. AA, AS) (4)
- ○ Bachelor's degree e.g. (BA, BS) (5)
- ○ Masters degree (e.g. MA, MS, MEd) (6)
- ○ Professional degree (e.g. MD, DDS, DVM) (7)
- ○ Doctorate (8)

Q45 Are you professionally involved in art and culture (in studies or work)?

- ○ Yes, please specify: (1) _____
- ○ No (2)

Q47 Are you interested in the following art forms?

Please indicate your level of interest by selecting a number (1 means 'totally not interested', 7 means 'very much interested').

	totally not interested 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	very much interested 7 (7)
Architecture (1)	○	○	○	○	○	○	○
Visual Arts (painting, sculpture, photography) (2)	○	○	○	○	○	○	○
Classical music / opera (3)	○	○	○	○	○	○	○
Theater (4)	○	○	○	○	○	○	○
Dance (5)	○	○	○	○	○	○	○
Popular Music (6)	○	○	○	○	○	○	○
Film (7)	○	○	○	○	○	○	○
Performing Arts (8)	○	○	○	○	○	○	○

Q49 How often have you visited the following events/venues in the past 12 months?

Per event/venue please select the most appropriate answer for you.

	Did not visit (1)	1 time (2)	2-3 times (3)	4-5 times (4)	6 times or more (5)
Architectural sites or buildings (1)	○	○	○	○	○
Art museums or galleries (2)	○	○	○	○	○
Concerts for classical music (3)	○	○	○	○	○
Theater plays (4)	○	○	○	○	○
Dance performances (5)	○	○	○	○	○
Popular music concerts or festivals (rock, rap, dance) (6)	○	○	○	○	○
Cinema (7)	○	○	○	○	○

Q51 For each of the following jobs, please indicate to which extent you think they are about **caring for other people**. 1 means not caring at all and 7 means entirely about caring for other people. There is no right or wrong answer. Only your personal opinion matters.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
lawyer (1)	○	○	○	○	○	○	○
surgeon (2)	○	○	○	○	○	○	○
professor (3)	○	○	○	○	○	○	○
CEO (4)	○	○	○	○	○	○	○
banker (5)	○	○	○	○	○	○	○
elementary school teacher (6)	○	○	○	○	○	○	○
sales assistant (7)	○	○	○	○	○	○	○
social worker (8)	○	○	○	○	○	○	○
caretaker (9)	○	○	○	○	○	○	○
receptionist (10)	○	○	○	○	○	○	○
film director (11)	○	○	○	○	○	○	○
architect (12)	○	○	○	○	○	○	○
choreographer (13)	○	○	○	○	○	○	○
orchestra conductor (14)	○	○	○	○	○	○	○
author (15)	○	○	○	○	○	○	○
movie star (16)	○	○	○	○	○	○	○
dancer (17)	○	○	○	○	○	○	○

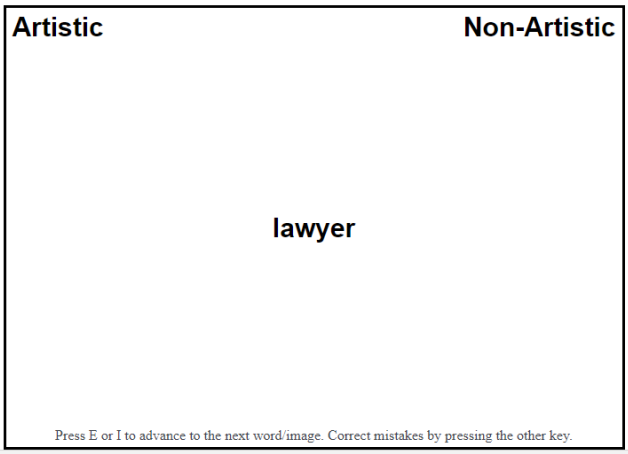
art school teacher (18)	○	○	○	○	○	○	○
make-up artists (19)	○	○	○	○	○	○	○
directing assistant (20)	○	○	○	○	○	○	○

Q55 For each of the following jobs, please indicate to which extent you think they can be considered **high in status**. 1 means no status at all and 7 means the highest possible status.
There are no right or wrong answers. Only your personal opinion matters.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
lawyer (1)	○	○	○	○	○	○	○
surgeon (2)	○	○	○	○	○	○	○
professor (3)	○	○	○	○	○	○	○
CEO (4)	○	○	○	○	○	○	○
banker (5)	○	○	○	○	○	○	○
elementary school teacher (6)	○	○	○	○	○	○	○
sales assistant (7)	○	○	○	○	○	○	○
social worker (8)	○	○	○	○	○	○	○
caretaker (9)	○	○	○	○	○	○	○
receptionist (10)	○	○	○	○	○	○	○
film director (11)	○	○	○	○	○	○	○
architect (12)	○	○	○	○	○	○	○
choreographer (13)	○	○	○	○	○	○	○
orchestra conductor (14)	○	○	○	○	○	○	○
author (15)	○	○	○	○	○	○	○
movie star (16)	○	○	○	○	○	○	○
dancer (17)	○	○	○	○	○	○	○

art school teacher (18)	○	○	○	○	○	○	○
make-up artists (19)	○	○	○	○	○	○	○
directing assistant (20)	○	○	○	○	○	○	○

Block 1



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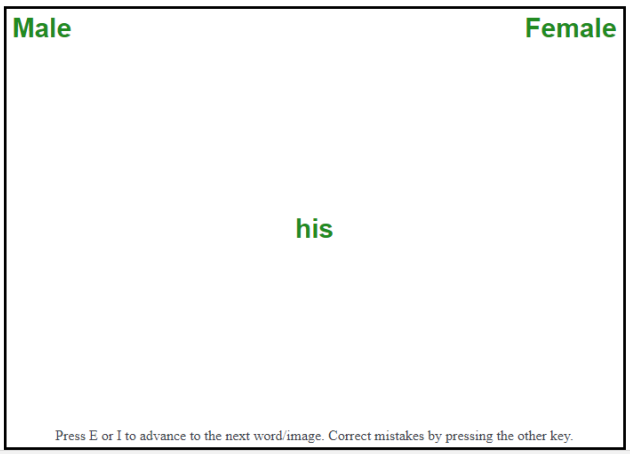

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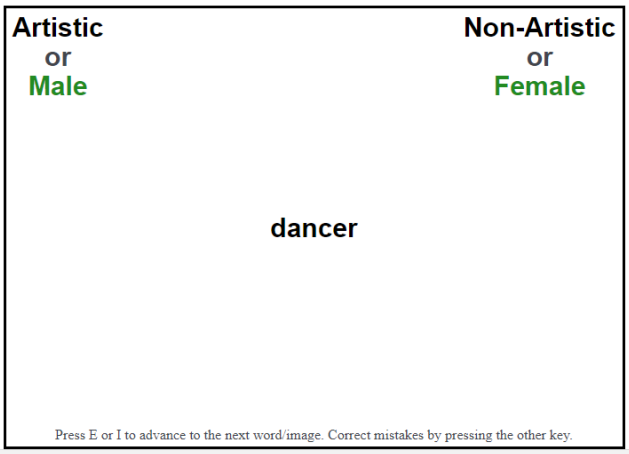

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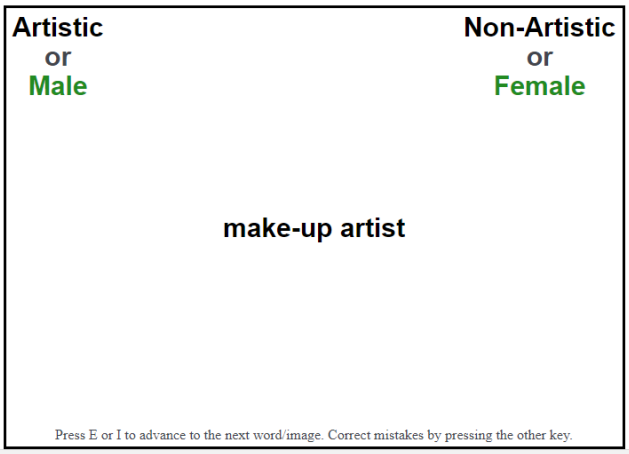

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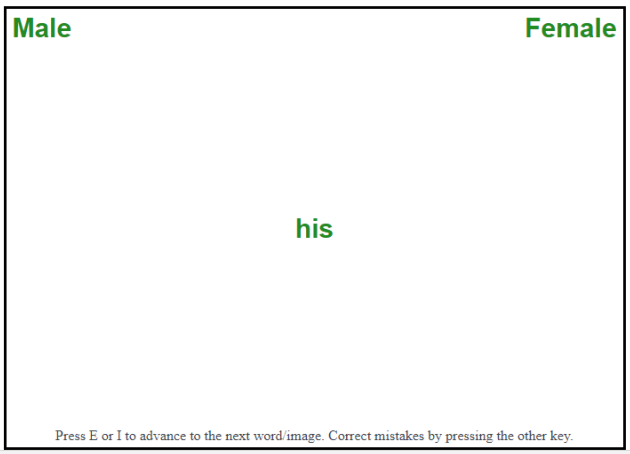

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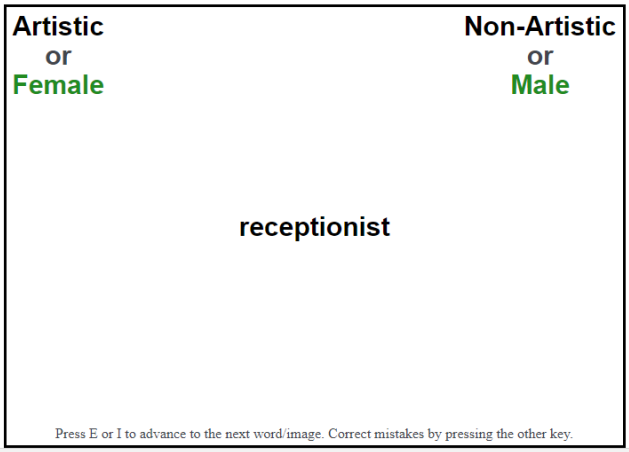

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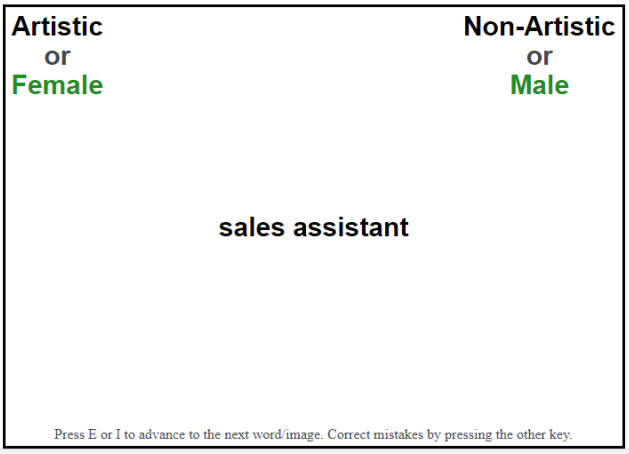

Q33 Thank you for participating in this survey!

If you have any comments or suggestions, please type them in below.

Appendix 2: IAT II

Job Status and Gender

Q31 The survey software has detected that you are attempting to take this survey from an incompatible device. The survey contains questions that will only function correctly on a computer with a keyboard. Please open this survey from a computer with a keyboard.

Q35

Hello,

We are conducting a study about jobs. Instead of a long questionnaire, this survey contains a little game. After a few background questions, everything about the game will be explained. Participating to this survey should take no more than 10 minutes of your time and it would help us a lot.

We should stress that it is important that you finish the entire survey in one go. At the end you will be given a unique survey code which you can insert in Mechanical Turk to validate your participation and receive payment.

We should emphasize that this survey is strictly scientific and will not be used for commercial purposes. Your answers are entirely anonymous and will not be shared with third parties.

By pressing the arrow button below, you agree to participating to this survey under the these conditions.

Thank you very much for participating in this research!

Q37 In which year were you born (please scroll down to select the appropriate answer)?

▼2005 (1) ... 1941 (65)

Q39 What is your sex/gender?

- ○ Male (1)
- ○ Female (2)
- ○ Other, please specify (3) _____

Q41 What is the highest level of education of which you hold a diploma (excluding education in which you have participated, but not obtained a degree)?

- ○ No formal education (1)
- ○ Less than a high school diploma (2)
- ○ High school degree or equivalant (e.g. GED) (3)
- ○ Associates degree (e.g. AA, AS) (4)
- ○ Bachelor's degree e.g. (BA, BS) (5)
- ○ Masters degree (e.g. MA, MS, MEd) (6)
- ○ Professional degree (e.g. MD, DDS, DVM) (7)
- ○ Doctorate (8)

Q43 What is the highest level of education you have participated in (even if you did not obtain a diploma) or in which you are currently enrolled (in case you are a student)?

- ○ No formal education (1)
- ○ Less than a high school diploma (2)
- ○ High school degree or equivalant (e.g. GED) (3)
- ○ Associates degree (e.g. AA, AS) (4)
- ○ Bachelor's degree e.g. (BA, BS) (5)
- ○ Masters degree (e.g. MA, MS, MEd) (6)
- ○ Professional degree (e.g. MD, DDS, DVM) (7)
- ○ Doctorate (8)

Q45 Are you professionally involved in art and culture (in studies or work)?

- ○ Yes, please specify: (1) _____
- ○ No (2)

Q47 Are you interested in the following art forms?

Please indicate your level of interest by selecting a number (1 means 'totally not interested', 7 means 'very much interested').

	totally not interested 1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	very much interested 7 (7)
Architecture (1)	○	○	○	○	○	○	○
Visual Arts (painting, sculpture, photography) (2)	○	○	○	○	○	○	○
Classical music / opera (3)	○	○	○	○	○	○	○
Theater (4)	○	○	○	○	○	○	○
Dance (5)	○	○	○	○	○	○	○
Popular Music (6)	○	○	○	○	○	○	○
Film (7)	○	○	○	○	○	○	○
Performing Arts (8)	○	○	○	○	○	○	○

Q49 How often have you visited the following events/venues in the past 12 months?

Per event/venue please select the most appropriate answer for you.

	Did not visit (1)	1 time (2)	2-3 times (3)	4-5 times (4)	6 times or more (5)
Architectural sites or buildings (1)	○	○	○	○	○
Art museums or galleries (2)	○	○	○	○	○
Concerts for classical music (3)	○	○	○	○	○
Theater plays (4)	○	○	○	○	○
Dance performances (5)	○	○	○	○	○
Popular music concerts or festivals (rock, rap, dance) (6)	○	○	○	○	○
Cinema (7)	○	○	○	○	○

Q51 For each of the following jobs, please indicate to which extent you think they are about **caring for other people**. 1 means not caring at all and 7 means entirely about caring for other people. There is no right or wrong answer. Only your personal opinion matters.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
film director (1)	○	○	○	○	○	○	○
architect (2)	○	○	○	○	○	○	○
choreographer (3)	○	○	○	○	○	○	○
orchestra conductor (4)	○	○	○	○	○	○	○
author (5)	○	○	○	○	○	○	○
movie producer (6)	○	○	○	○	○	○	○
fashion designer (7)	○	○	○	○	○	○	○
publishing agent (8)	○	○	○	○	○	○	○
theater producer (9)	○	○	○	○	○	○	○
film critic (10)	○	○	○	○	○	○	○
movie star (11)	○	○	○	○	○	○	○
dancer (12)	○	○	○	○	○	○	○
art school teacher (13)	○	○	○	○	○	○	○
make-up artists (14)	○	○	○	○	○	○	○
directing assistant (15)	○	○	○	○	○	○	○
guitar player (16)	○	○	○	○	○	○	○
stage hand (17)	○	○	○	○	○	○	○

tailor (18)	○	○	○	○	○	○	○
museum employee (19)	○	○	○	○	○	○	○
runway model (20)	○	○	○	○	○	○	○

Q55 For each of the following jobs, please indicate to which extent you think they can be considered **high in status**. 1 means no status at all and 7 means the highest possible status.
There are no right or wrong answers. Only your personal opinion matters.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
film director (1)	○	○	○	○	○	○	○
architect (2)	○	○	○	○	○	○	○
choreographer (3)	○	○	○	○	○	○	○
orchestra conductor (4)	○	○	○	○	○	○	○
author (5)	○	○	○	○	○	○	○
movie producer (6)	○	○	○	○	○	○	○
fashion designer (7)	○	○	○	○	○	○	○
publishing agent (8)	○	○	○	○	○	○	○
theater producer (9)	○	○	○	○	○	○	○
film critic (10)	○	○	○	○	○	○	○
movie star (11)	○	○	○	○	○	○	○
dancer (12)	○	○	○	○	○	○	○
art school teacher (13)	○	○	○	○	○	○	○
make-up artists (14)	○	○	○	○	○	○	○
directing assistant (15)	○	○	○	○	○	○	○
guitar player (16)	○	○	○	○	○	○	○
stage hand (17)	○	○	○	○	○	○	○

tailor (18)	○	○	○	○	○	○	○
museum employee (19)	○	○	○	○	○	○	○
runway model (20)	○	○	○	○	○	○	○

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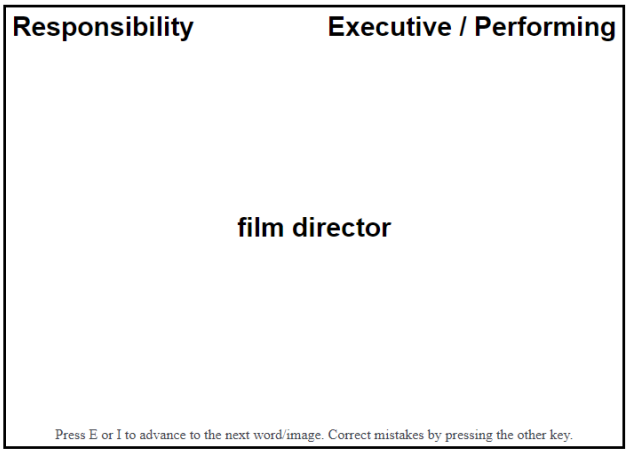

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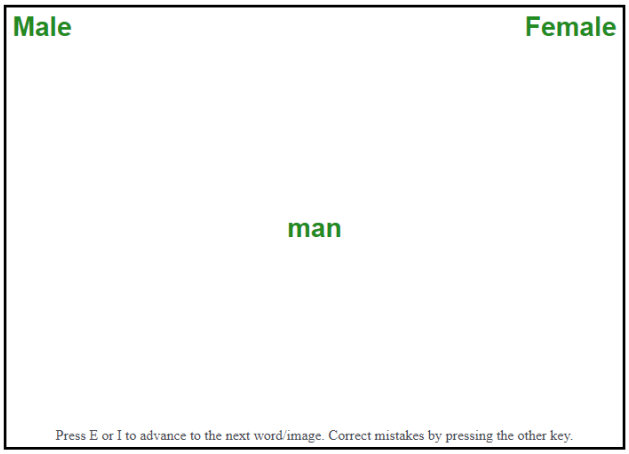

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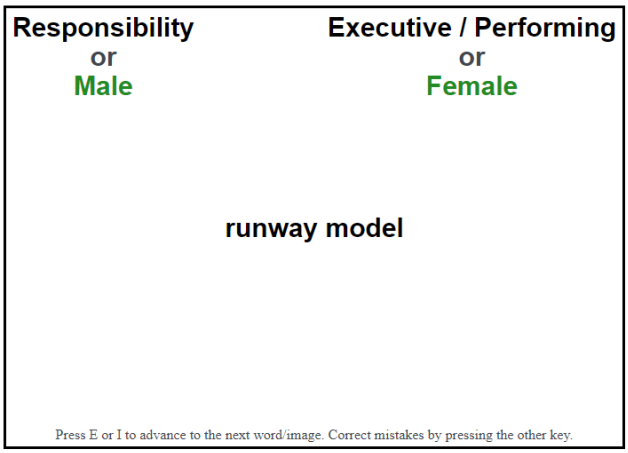

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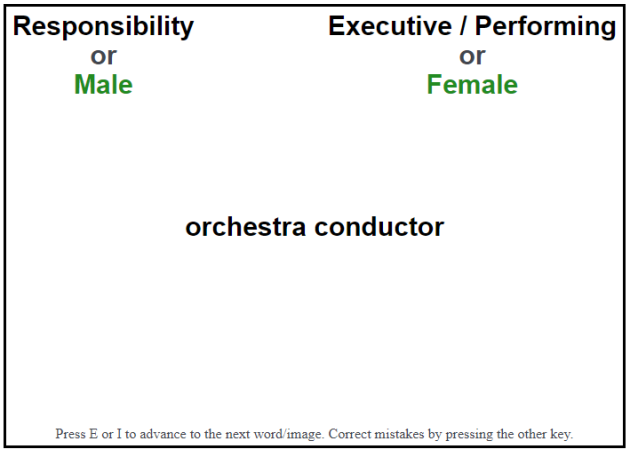

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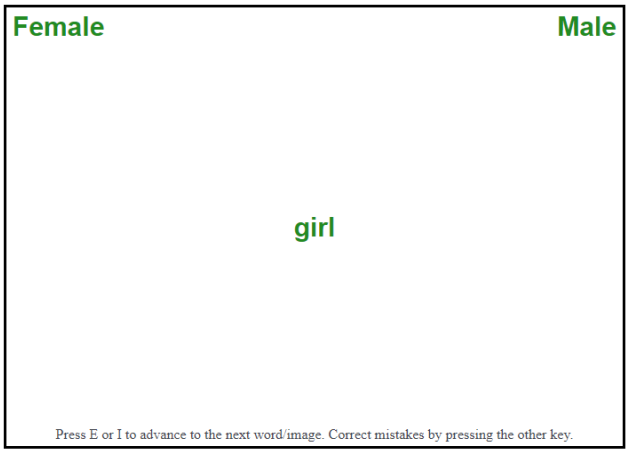

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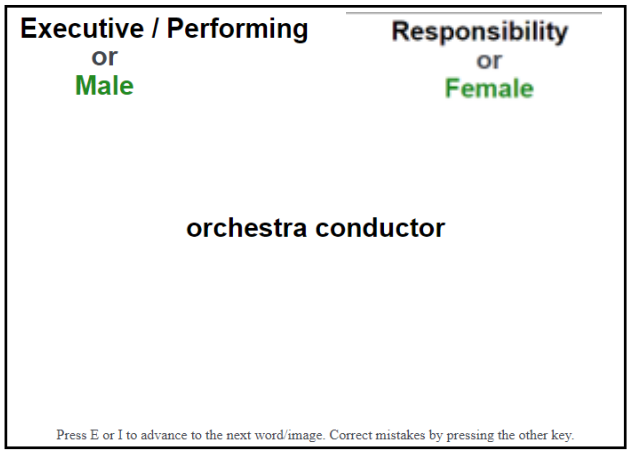

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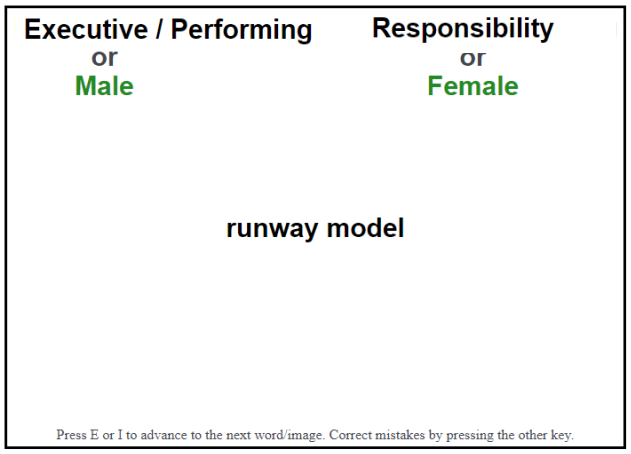

Q33 Thank you for participating in this survey!

If you have any comments or suggestions, please type them in below