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Fear at Delivering Presentations: Relations to Age

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Abstract

Highly polished presentations skills became prevalent communication technique in various academic and business disciplines fields. Presentation competencies became not just preferable, but indispensable for graduates on the employment market. The fear is the main reason, which decreases the presentation's delivering guality, so the teachers include presentations into curricula from early stages of educations. Scholars continuously develop techniques and methods, which reduce student stress and anxiety during a presentation performance. However, different methods are effective for different types of fears and anxieties. The purpose of this paper is to establish is their connection between different age groups and different types of fear. The research was undertaken on a sample of 495 students from the Faculty of Economics and Business in Zagreb, and the correspondence analysis was used to examine the data. The evidence from this study confirmed that the different age groups are more prone to different kind of fears, and it provided a deeper understanding of the origins of student presentation fears. The results could be beneficial both for scholars who can use this paper for developing further investigations and for practitioners who work with students, for developing specific methods for different kind of fears and age groups.

Keywords: presentation skills, fear, public speech, correspondence analysis, education, **JEL classification:** A23

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Introduction

The communication capacity is one of the main postulates of success both in personal and business areas of life (Appiah-Adu et al., 2018). Communication represents more than just an exchange of sentences; scholars describe it as a dynamic interaction where participants effectively exchange ideas, facts, opinions, feelings and values in order to inform, relate and persuade (Pena-Shaff & Nicholls, 2004).

Successful delivering oral presentations became a powerful communication technique in various academic and business disciplines fields (Van Ginkel, 2015). Business, Politics, Engineering, and Health are just some of the examples where presentations became not just desirable, but a required in order to express and articulate new ideas, findings or strategies to colleagues, business partners and public (Dunbar et al., 2006). Studies have reported that elaborated presentations delivery is not only crucial for personal career success, but it also adds value to the whole organisation (Higgins et al., 2014). For instance, a study from Azis (1998) acknowledged that presentation skills were more important for employment and success in business than intelligence or financial proficiency.

In competitive business surroundings, like nowadays, employers have high expectations from their job applicants (Brynjolfsson & Mcafee, 2017). Therefore, graduates are expected to have excellent communication skills. In higher education, presentation skill-developing became an essential objective to integrate into curricula study programs worldwide (Cooper, 2006; Morreale et al., 2006). The ability to present in higher education is associated to the student ability to deliver a presentation to the audience, to successfully transfer information or a message from one channel to the other (Haber & Lingard, 2001). However, it is not just that higher education implements presentation skills learning in their programs, these learning start from an early age Popescu et al. (2013).

Developing presentation skills thru education is essential because when students prepare a presentation, it enhances their learning and understands of distinct concepts, along with they remember the learned knowledge for a longer time when they actively include visual and verbal aspects in their learning process Cetin and Eymur (2017). Students are expanding their critical thinking by working in groups, they foster ideas and creativity thru writing and presenting ideas, and evolving by exchanging feedbacks (Freeman et al., 2014). Research from 2000 pinpointed that students recognised the importance of presentation and communication skills, so they highlighted it as one of the most important factors for curricula upgrading (McKeen et al., 2000).

Literature review

However, public speaking is often defined as the most common fear that "individuals experience in social situations" (Smith & Sodano, 2011). Fear of public speaking is considered as continues fear of delivering social or performances in which the "person is exposed to unfamiliar people or possible scrutiny by others" (Slater et al., 2006). The fear of public speaking negatively affects presentation delivery performance (Brown & Morrissey, 2004). Numerous investigations were undertaken to explore the reasons for fear of presentation and in order to offer solutions of how to increase the quality of the student presentations delivery and decrease the fear. The previous investigation has reported a negative correlation between the anxiety of students and their performance.

For example, the preliminary work conducted by Rubin et al. (1997) stressed out that the fear of delivering presentation could be reduced through a practice of many repetitions of rehearsing the presentation, so the technique was widely accepted by educational organizations. Alshare and Hindi (2004) was first who highlighted that both students and teachers recognised benefits from delivering presentations. The same author singled out the computer-based presentation as the highly effective method of teaching and learning pinpointing that the students acknowledge a better understanding of the materials when working on computerbased presentations. Moreover, students' assessment results express a need to further work on individual presentation delivery skills and anxiety reduction while public speaking.

On the other hand, authors Sukitkanaporn and Phoocharoensil (2003) and Christianson and Payne (2006) give their contribution on the topic by proposing the format of successful presentations and by distinguishing the factors of what quality presentation should consist as well as the tips for the better delivery execution. Sideris and Kafetsios (2006) emphasise the correlation between secure parenting environment and lower stress level, and specifically a fear of failure, which is connected with higher performance achievement. The finding was also useful for educational organisations as their teachers could use incorporate supportive communication methods which could lead to enhanced student's confidence, and, therefore, higher achievement.

Bower et al. (2011) highlighted that students level of knowledge about communication techniques advance their presentation competence. Further, on, just one year later, Halder (2012) suggested that presentation anxiety within students could be reduced by including exercise such as making a presentation about presentation skills. The exercise results came out as extremely beneficial for students' confidence, and, consequently, the lower likeliness for developing negative feeling such as different kind of fears, humiliation and anxious feelings.

At the year 2017 Cetin and Eymur propose a new conceptual model, which helps students to increase their presentation ability. It is based on argument-driven inquiry (ADI) as the most novel instructional model, which is developed on the social cognitive theories of learning. The model showed as successful in improving students' argumentative writing and presentation skills. Sugeng and Suryani (2018) once again investigated correlation between students' self-confidence and presentation delivering skills and it was taken out as a crucial factor both for independent learning and for presentation skills.

Research goals

Numerous methods for improving presentation skills and reducing stress from previous studies are stated above. However, in order to successfully implement stated recommendations and methods to reduce the stress of delivering presentations and enhance the presentations skills and presentation quality. It is important to identify the origin of the fear of presentation between students. Therefore, the main purpose of this paper is to distinguish the fear of presentations between three types of fear: Fear of failure, fear of criticism and fear of mockery. This study will examine whether the students of certain age groups are more prone to experience a specific kind of fear. The research hypothesis is that different age groups are more prone to different types of fear of mockery than the older ones, and the students in higher classes could be more prone to the fear of failure due to the higher pressure of the graduation and career choice. Kaharaman et al. (2011) investigated the correlation between gender and

attitude towards presentation, but to our best knowledge, no one researched the connection between age groups and dimensions of anxiety while delivering presentations.

This research provides both academic and practical implications: The deeper knowledge between connections of students' age group to the specific type of fear could be beneficial for different directions of further investigations, and it could help educators to use specialized methods for reducing different types of fear, among different age groups.

Methodology

Research instrument

Given the investigation topic, research instrument was developed for measuring anxiety at delivering presentations. Both fear and anxiety are connected to the stress level of presentation delivery, specifically; fear produces anxiety during presentation delivery, so the research items will be measured thru three dimensions of fear. The central question for this paper was "Fear of delivering presentations". The central question will be examined by measuring three research items of fear between different age groups: Fear of failure, fear of criticism and fear of mockery. For instance, the fear of failure could mean the failure of bad presentation, which can produce bad academic consequences as bad grades, and then lower possibilities in the further education process. The fear of criticism could mean the criticism of teachers, and the fear of mockery is concentrated on colleagues and other students' mockery. The respondents will measure their answers by Likert scale where they value their fear as 1-fear is not present at all, 2- fear is rarely present, 3-fear is sometimes present, 4- fear is often present, 5-fear is always present. The research instrument is presented in Table 1.

Table 1

Research instrument measuring anxiety at delivering presentations

| Dimension | Research items | Measurement | | |
|------------------------|-------------------|------------------------------|--|--|
| Q1. Fear at delivering | Fear of failure | 1-fear is not present at all | | |
| presentations | Fear of criticism | 2-fear is rarely present | | |
| | Fear of mockery | 3-fear is sometimes present | | |
| | | 4-fear is often present | | |
| | | 5-fear is always present | | |

Source: Author's work

Data

The questionnaire sample was obtained from undergraduate and graduate students from the Faculty of Economic and Business, Zagreb. The respondents' age range is from 18-25 years. Student of age 18 is excluded from the research due to be the only respondent in that category. The sample has 495 respondents, which are 74.1% female, and 25.9% male. There are 15.4% respondents age 19, 6,5% age 20, 39,8% age 21.18% age 22, 10.9% age 23.5,9% age 24 and 3.4% students with age 25. Furthermore, most students came from gymnasium and business secondary schools, only 6.3% finished other secondary schools. Table 2 in the following text show sample characteristics.

| | Frequency | % | Cumulative % |
|---------------------------|-------------|------|--------------|
| | Gender | | |
| Male | 128 | 25.9 | 25.9 |
| Female | 367 | 74.1 | 100 |
| | Age | | |
| 18 years | 1 | 0.2 | 0.2 |
| 19 years | 76 | 15.4 | 15.6 |
| 20 years | 32 | 6.5 | 22 |
| 21 years | 197 | 39.8 | 61.8 |
| 22 years | 89 | 18 | 79.8 |
| 23 years | 54 | 10.9 | 90.7 |
| 24 years | 29 | 5.9 | 96.6 |
| 25 years | 17 | 3.4 | 100 |
| Тур | e of school | | |
| Gymnasium | 261 | 52.7 | 52.7 |
| Business secondary school | 203 | 41 | 93.7 |
| Another secondary school | 31 | 6.3 | 100 |
| Total | 495 | 100 | |

Table 2 Sample characteristics

Source: Author's work

Correspondence analysis

Correspondence analysis is an exploratory data technique used to analyse categorical variables (Benzecri, 1992). It can transform complicate tables into clear graphical displays by analysing either two ways or multi-way tables (usually two or three dimensions) where rows and columns are distributed as dots on multidimensional graphical biplot (Hoffman & Franke, 1986).

The outcome of CA is a graphical display of contingency table, which shows salient relationships among the variables thru dots in a biplot in order to illustrate the most important relationships among the data relative values using a graphical representation (Sourial et al., 2010). The primary goal of CA is to illustrate the most important relationships among the variables' response categories using a graphical overview (Benzeceri, 1992). When dots are closer together on the graphical map it implies on the connection between the data characteristics. The row and column points are shown on the same graphical display allowing for easier visualization of the associations among variables (Storti, 2010).

It is used in many areas such as marketing and ecology. Correspondence analysis has been used less often in psychological research, although it can be suitably applied. This paper will show the benefit of correspondence analysis usage in terms of instant visual data outline which enable to see the relationship between data without looking the numeric values, as to see the hidden connections between variables and obtain deeper knowledge.

Results

Correspondence analysis was conducted on the sample data, following results include three separate two-dimensional correspondence analysis, which provides separate results for three research items: Fear of failure, fear of criticism, and fear of mockery of respondents between age 19 and 25.

Table 3 shows the relationship between age groups and fear of failure. Presented data suggest that all age groups acknowledge that the fear of failure is sometimes

present during delivering presentations. However, younger age groups (age groups 19 and 20) have the fewest responses in category: Fear is not present at all. This could be because of their lack of presentation delivery experience and practice. Remaining age groups show the lowest number of responses in the "extreme categories" like Fear is not present at all, and Fear is always present which indicate that they all acknowledge the fear of failure during presentation delivery, but it's not always present, but it varies by person and occasion.

| | | | | Failure | | | | Chi- |
|-----|------|----------------------------------|------------------------------|---------------------------------|-----------------------------|------------------------------|-------|-------------------------|
| | | fear is not present at all | fear is rarely present | fear is sometimes present | fear is often present | fear is always present | Total | square (p- value) |
| Age | 19.0 | 9 | 21 | 21 | 14 | 12 | 77 | 17.985 |
| - | 20.0 | 1 | 8 | 11 | 8 | 4 | 32 | (0.804) |
| | 21.0 | 21 | 48 | 67 | 41 | 20 | 197 | |
| | 22.0 | 12 | 17 | 29 | 19 | 12 | 89 | |
| | 23.0 | 1 | 12 | 24 | 10 | 7 | 54 | |
| | 24.0 | 2 | 5 | 13 | 7 | 2 | 29 | |
| | 25.0 | 2 | 4 | 7 | 1 | 3 | 17 | |
| То | tal | 48 | 115 | 172 | 100 | 60 | 495 | |

Table 3 Sample characteristics

Source: Author's work

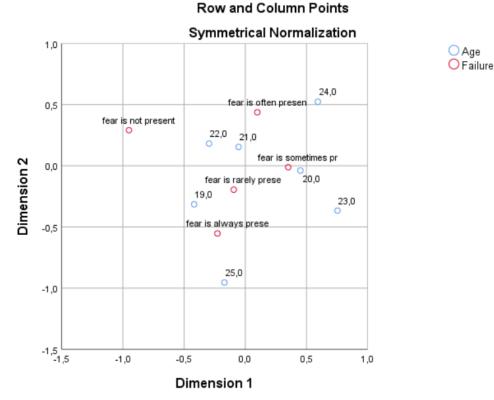
The age group of 19 years show that most respondents claim that the fear of presentation failure is rarely or sometimes present. As stated before, the fewest number of students by this age group claim that fear is not present at all. Age 20 group show that most students responded that the fear of failure is sometimes present, and the least number of students at age 20 express that the fear is not present at all. 21-year-old students express that the fear of failure is sometimes present, following by rarely present, and the least of them expressed that the fear is not present at all or that the fear is always present. All age groups (22-25 years) had the same response distribution.

Figure 1 presents the correspondence analysis of the relationship between age and the fear of failure by two dimensions: Failure and Age. The correspondence analysis visually shows relative data distribution without numeric values. The data are mostly grouped around origin so the relative values could mostly be interpreted around average values. Chronbach's alpha was >0.9 which indicate high internal consistency.

The age groups 21 and 22 show the most similarities, and the age 25 group is the furthest from data shown on the graph and it's relatively separated from other age groups. The "Fear is not present" dimension is furthest from all other data, which indicate the lesser extent of correlation. The fear dimensions "rarely", "sometimes" and "often" show a higher connection to the data from Dimension 2 than "not present" and "always".

Figure 1

Correspondence analysis of the relationship between age and fear of failure



Source: Author's work

Table 4

All age groups show the relative similarities with "fear is sometimes present" variable, but the age groups 20 and 21 show the closest correspondence. Age groups 19-22 form a cluster and are more connected and closely distributed than age groups 23-25 years old. The strongest correlation is between the age group of 20 years old and the "Fear is always present variable" which suggest that the younger age groups show a higher level of "Fear of failure" than the others, except the age group of 25 years old students, who also evidence the strong relationship with the "Fear is always present" dimension.

| Relationship between age and fear of criticism | | | | | | | | | |
|--|------|----------------------------------|------------------------------|--|-----------------------------|------------------------------|-------|---------------------------------|--|
| | • | fear is not present at all | fear is rarely present | Failure fear is sometimes present | fear is often present | fear is always present | Total | Chi- square (p- value) | |
| Age | 19.0 | 17 | 17 | 16 | 18 | 9 9 | 77 | 40.559 | |
| Ŭ | 20.0 | 1 | 13 | 6 | 10 | 2 | 32 | (0.019)** | |
| | 21.0 | 36 | 51 | 73 | 22 | 15 | 197 | | |
| | 22.0 | 9 | 25 | 35 | 11 | 9 | 89 | | |
| | 23.0 | 5 | 14 | 19 | 10 | 6 | 54 | | |
| | 24.0 | 5 | 7 | 9 | 7 | 1 | 29 | | |
| | 25.0 | 1 | 8 | 6 | 2 | 0 | 17 | | |
| To | tal | 74 | 135 | 164 | 80 | 42 | 495 | | |

Note: Statistically significant at 5% Source: Author's work

Table 4 displays the relationship between age and fear of criticism. The result show data with statistical significance at 5%. Similar to the previous data distribution, most respondents all age groups rated fear of criticism as "Sometimes present", except age group of 19 years old respondents. Chronbach's alpha was >0.9 which indicate high internal consistency.

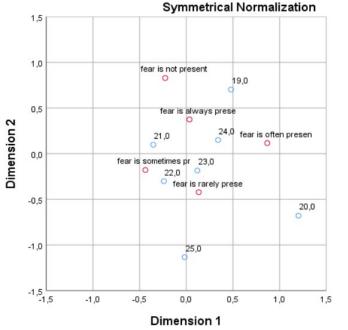
The 19-year-old respondents most frequently stated that fear of criticism when delivering a presentation is "often present". The same respondent's group stated category "fear is always present" as the least common one. The age group of 20 years mostly answered that fear of criticism is rarely present but only one student answered that fear is not present at all. The age group of 21 years responded mostly that fear is sometimes present, and the least common answer is that "Fear is always present". Respondents of age 22 most commonly stated that "Fear is sometimes present" and the least common answer is that "Fear is not present". Students of age 23, 24 and responded with the distribution of the same answers.

The results are similar as results for the fear of failure, except for the lack of fear in age 19. What is interesting is that, as the respondents' year increase, the percentage of first two columns, which indicate no amount, or small presence of fear increases, and the last two columns, which indicate often, or always-present fear, decreases.

O Age O Criticism

Figure 2

Correspondence analysis of the relationship between age and fear of criticism



Row and Column Points

Source: Author's work

Figure 2 displays a correspondence analysis of the relationship between age and fear of criticism. The graph shows the relationship between data divided into rows and columns by two dimensions: "Criticism" and "Age". Densely concentrated data suggest that there is a lot of similarity between data relative correspondence. Values are mostly concentrated around the origin, so they are close to average values.

Concentrated data form a cluster, which indicates a high level of correspondence between data. Variable "fear is not present" relationship of the

lesser extent with other dimension variables than the others. Age groups 21-24 show the most similarities between relative values. The "Fear is not present" dimension has the highest correspondence with age 19.

The "Fear is rarely present shows relationship" correspond mostly with age groups of 22 and 23 years old, but all participants age groups show correspondence with the latter dimension. "Fear is sometimes present" also show correspondence with all age groups, but have the strongest relationship with age groups of 21-24 years old. Dimension variable "Fear is often present" have the strongest correspondence with age groups 19, 20, 23 and 24. Fear is always present to have the strongest relationship with age groups 19 and 21.

Table 5 shows the relationship between dimensions "Age" and the "Fear of mockery". The fear of mockery shows the highest number for "Fear is not present at all" for all selected age groups of all three research items which imply that the fear of mockery is the least represented fear why delivering presentations. Cronbach's alpha was >0.9 which indicate high internal consistency.

All age groups except age group of 20 years show the highest numbers for category "Fear is not present at all", and the group of 20 years have high numbers for both "fear is not present at all" and "Fear is rarely present" categories. All age groups value category "Fear is always present" with the lowest frequency.

Table 5

Relationship between age and fear of mockery

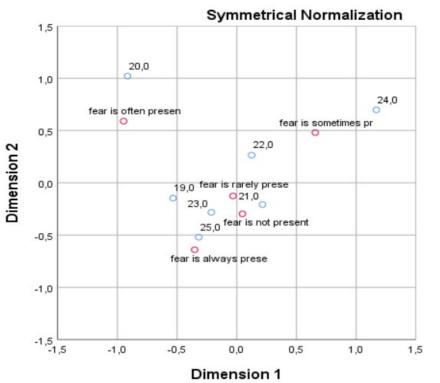
| | | | | Failure | | | | Chi- |
|-----|------|----------------------------------|------------------------------|---------------------------------|-----------------------------|------------------------------|-------|-------------------------|
| | | fear is not present at all | fear is rarely present | fear is sometimes present | fear is often present | fear is always present | Total | square (p- value) |
| Age | 19.0 | 26 | 20 | 10 | 14 | 7 | 77 | 39.896 |
| | 20.0 | 8 | 9 | 5 | 10 | 0 | 32 | (0.022)** |
| | 21.0 | 76 | 55 | 40 | 17 | 9 | 197 | |
| | 22.0 | 28 | 20 | 23 | 12 | 6 | 89 | |
| | 23.0 | 19 | 16 | 8 | 7 | 4 | 54 | |
| | 24.0 | 8 | 8 | 12 | 1 | 0 | 29 | |
| | 25.0 | 7 | 7 | 1 | 2 | 0 | 17 | |
| То | tal | 172 | 135 | 99 | 63 | 26 | 495 | |

Note: Statistically significant at 5% Source: Author's work

Figure 3 shows correspondence analysis of data relationship between rows and columns where are displayed variables for Dimension 1: "Mockery" and Dimension 2: "Fear". Data are widely distributed than the other research items, which demonstrate a lower correspondence between variables. The vector location of the data is distributed further from the origin so they show a higher significance. Variables "Fear is not present" and "Fear is rarely present" form a cluster with age groups 19, 21, 23 and 25 and they show the highest relative correspondence. The age group of 20 years is separated from the other age group and show high correspondence with the "Fear is often present" dimension. Age group 24 show the most similarities with "Fear is sometimes present" variable. The least correspondence of the whole dataset is showed between variable "Fear is always present" and age group 20.



Correspondence analysis of the relationship between age and fear of mockery



Row and Column Points



Source: Author's work

Conclusion

Good presentation skills are highly important and affect persons in private and professional life. Being proficient on oral presentations in a competitive business market is something that is not only preferable, but it became necessary, and the fear is the main reason for bad presentation delivery. Education organisations are well aware of that state and they implemented presentation exercises in curricula from the early stages of education. Furthermore, as mentioned in the literature review, numerous researches have addressed the problem and investigated how to improve presentation skills and reduce fear and anxiety.

However, the extensive method, which can solve all presentation fears, does not exist, so the comprehension of origin of fear during presentation could help to develop specific techniques to reduce stress and anxiety.

The purpose of this paper is to explore dimensions of fear at delivering presentations among different age of students. Three research items were included: fear of failure, fear of criticism and fear of mockery. Correspondence analysis was made and the relationship between data was explored; results confirmed different fears between different age groups. By observing the "Fear of failure" dimension, younger students present lower fear rate that the older ones, as they get older and became closer to finishing the study and employment, the "stakes are higher" and the fear is higher. As opposed to the fear of criticism, younger students have a higher fear of criticism than older. This could be explained that older students are more mature and they can take criticism constructively. However, the study showed that all age groups students of criticism the most, students fear of mockery the least for all age groups. This could be explained as the students' fear of professor is higher than the fear of their colleagues, which are more likely to mock them than professors, and all student at some point has to deliver presentations so the mockery level is lower.

This paper contributes because not only it confirms different fear between different age groups, but it also gives a better view of the origin of student fears, which is important to all people who work with different age groups, especially education. Fear can often manifest the same way, but if the origin is not the same, it needs different approaches and techniques to solve it and prevent it. Furthermore, the correspondence analysis was a useful method, which visually demonstrated relationships between data, so the variables could easily be observed and compared. Choosing of correspondence analysis is considered as a contribution of this paper as it not that often used in similar datasets, and it show substantial benefits, more research should include it in their "tool-kit" of analytical approaches.

Paper limitations and further implications

The limitations of the paper are that this sample is taken into consideration only FEB students, so further investigations should include more student groups. High school students could also be included in the investigation to expand observed age groups scope. Furthermore, more dimensions could be included in the investigation in order to gain deeper knowledge into fear origins.

Findings stated in the previous chapter enhance our understanding of the topic and can serve as a base for further investigations. The further investigations should concentrate on the larger and more diverse sample, and with more dimensions included. Correspondence analysis showed as a useful tool in this kind of investigations, so it could be used in future similar researches.

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