A Work Project, presented as part of the requirements for the Award of a Master's degree in

Management from the Nova School of Business and Economics.

The Effects of a Self-awareness Workshop on Emotional Intelligence and Self-efficacy Levels of Human Resources Management Students

Filipa Gomes Paulino

Work project carried out under the supervision of:

Helena Martins

17-05-2024

Abstract

This research aims to assess if a workshop on self-awareness can enhance emotional intelligence and self-efficacy levels of Human Resources Management students, thus improving their performance under crisis circumstances. Based on theoretical background, a training session was designed and delivered to the students, who answered three questionnaires based on the Wong and Law Emotional Intelligence Scale and the C-Lead Scale. Statistical analysis did not reveal that the workshops were successful in increasing the students' overall levels of emotional intelligence and self-efficacy. Addressing the challenges of this experiment, further research can help clarify if there is a relationship between the concepts.

Keywords

Training, Training Design, Emotional Intelligence, Self-Awareness, Self-Efficacy, Leadership, Human Resources Management, Soft Skills, Crisis Management

This work used infrastructure and resources funded by Fundação para a Ciência e a Tecnologia (UID/ECO/00124/2013, UID/ECO/00124/2019 and Social Sciences DataLab, Project 22209), POR Lisboa (LISBOA-01-0145-FEDER-007722 and Social Sciences DataLab, Project 22209) and POR Norte (Social Sciences DataLab, Project 22209).

Table of Contents

List of Figures

List of Tables

1. Introduction

Soft skills play nowadays an important role in leadership potential (Creel *et al*., 2023). Emotional intelligence is one of the fundamental soft skills highlighted by Islam *et al*. (2023), with self-awareness indicated as one of its sub-skills. Emotional intelligence and self-awareness have been the object of multiple studies, and the literature indicates that both can be improved by training, according to Hodzic *et al*. (2018) and Sutton *et al*. (2015).

In recent years, the world has witnessed crisis emerging in very different forms: a pandemic that forced individuals and companies to restructure the way they conducted their daily activities, wars that devastate communities, and political instability in multiple parts of the globe. Students, specifically, had their life psychological affected by the Covid-19 pandemic (Xiong *et al*., 2020), and therefore, it is important to provide them with tools to navigate crisis in an optimized way. Furthermore, Mackinnon *et al*. (2013) suggest that self-efficacy can be an adequate tool to assess performance in crisis situations.

This research intends to assess if a workshop about self-awareness administered to Human Resources Management students can improve their emotional intelligence and self-efficacy levels, thus being a relevant tool to improve performance in crisis scenarios.

The objectives of this study are the following:

- To review relevant literature on the topics of emotional intelligence training and self-efficacy.
- To design and implement a 1-hour workshop on self-awareness directed at Human Resources Management students.

- To analyze emotional intelligence and self-efficacy levels pre- and post-intervention based on adequate tools.
- To assess if there is an association between a training session on self-awareness and levels of emotional intelligence and self-efficacy.

Using the Wong and Law Emotional Intelligence Scale (2002) and the Assessing and Deciding (C-Lead) Scale (Hadley *et al*., 2009), students were provided an identical questionnaire in three distinct stages, before the session, immediately after the session, and one week after the session.

This paper will start by analyzing the literature on the topics, which was used as a basis to design the training session implemented with the students. After a description of the sessions and the instruments used in the study, the demographics and statistical results will be analyzed, followed by a discussion of said results and a presentation of the conclusions reached.

2. Literature Review

In the recent past, **emotional intelligence** (EI) and, specifically, **self-awareness**, have been the object of multiple studies (e.g., Fattah *et al*. 2023; Venkatesh *et al*., 2023; Hodzic *et al*. 2018).

Emotional intelligence encompasses one's ability to comprehend deep emotions and express them in a natural manner, understand other's emotions, use them, and regulate them effectively in a way that facilitates recovery from psychological challenges (Nguyen *et al*., 2023).

Authors seem to distinguish two natures of emotional intelligence: ability-based vs trait-based. Thus, some authors (e.g., Mayer and Salovey, 1997) define the concept as being the ability to process emotional information and apply it in decision-making, while others (e.g., Petrides & Furnham, 2003) define it as an individual trait comprising a blend of moods and one's perceived

capacity for emotional self-efficacy. Additionally, in 1997 Bar-On developed a mixed model of emotional intelligence, which is a combination of all the aspects included in ability and trait-based emotional intelligence while also including other capabilities such as self-management and optimism.

Emotional intelligence training and, specifically, self-awareness training has been shown to be effective and beneficial for individuals and organizations (Development and Learning in Organizations, 2016). Thus, people can be effectively trained to improve emotional intelligence, which encourages the development of training programs in this area (Sutton *et al*., 2015; Hodzic *et al*., 2018). Leaders who present higher levels of self-awareness tend to be more effective and cultivate greater satisfaction among their subordinates compared to those with lower levels of self-awareness (Atwater *et al*., 1995). Additionally, self-awareness seems to be positively associated with job-related well-being (Sutton *et al*., 2015).

Self-awareness is a competence that can be developed within the scope of emotional intelligence and, according to Venkatesh *et al*. (2023), it is related to an individual's capacity to recognize their own strengths and weaknesses. The authors developed a self-awareness training intervention for young adults to study its effect on professional skills. The format of this training consisted of a half-day activity focused on four different domains (harmony, self-believe, adaptability, and discipline). It was concluded that the intervention led to improvements in connecting with peers and team interaction, as well as improvements in acknowledging one's abilities and self-discipline, which demonstrates the positive impact of self-awareness training on personal and interpersonal skills (Venkatesh *et al*., 2023).

Regarding the elements that seem to be antecedents of self-awareness, Fattah *et al*. (2023) identified high education level, efficient income, and experience as having a positive effect on

emotional intelligence levels. Furthermore, Hodzic *et al*. (2018), found that interventions based on improving specific emotional abilities are the most effective.

Wilson & Dunn (2004), describe three methods to improve self-awareness: introspection, viewing ourselves through the eyes of others, and self-observation. Table 1 presents the description and impact of each method.

Table 1 - Methods to Improve Self-Awareness

Method	Description	Impact
Introspection	Process through which individuals utilize the contents of their consciousness to build a personal narrative that may or may not align with their unconscious state	Positive association with health, academic performance, job outcomes, and well-being
Viewing ourselves through the eyes of others	Observing how other people see us and acknowledging the differences between their views and our own	Potential to inform us about our nonconscious states
Self-observation	Observing one's own behavior and the conditions associated with that behavior	Association with aligning conscious and unconscious goals, and greater personal happiness

(Adapted from Wilson & Dunn, 2004; Development and Learning in Organizations, 2016)

Kulinich *et al.* (2023) discuss the effectiveness of training emotional intelligence and intuition, along with other change management strategies in the context of unpredictable world circumstances. The authors highlight that in the current changing world conditions, it is extremely difficult to accurately predict all multifaceted influences as well as their significance, stating that emotional intelligence training can play a relevant role in navigating such events. A study conducted by Costa *et al.* (2021) on management students indicates the positive impact of an educational intervention based on the experiential learning model and positive psychology on students' PsyCap, which, according to the authors, includes four psychological attributes: self-

efficacy, optimism, hope, and resilience. However, the intervention was less effective in increasing the students' overall levels of emotional intelligence.

In the organizational context, crisis is defined by Coombs (2015) as "the perception of an unpredictable event that threatens important expectancies of stakeholders related to health, safety, environmental, and economic issues and can seriously impact an organization's performance and generate negative outcomes" (p. 3). In essence, crisis threatens organizational assets (Coombs & Holladay, 2014), therefore, it is crucial to understand how companies can navigate crisis in a more effective manner.

In crisis situations, emotional intelligence and resilience seem to be closely linked, as shown in a study by Nguyen *et al*. (2023) with students during the Covid-19 pandemic, where it was concluded that individuals with high levels of emotional intelligence overcome stress better than those who do not display high levels of this ability, in line with Fattah *et al*.'s work (2023) who found that emotional intelligence is effective in avoiding burnout.

EI online training has also been subject to studies, such as the one by Durham *et al*. (2023) who developed an online training program which encompassed a total of 10 to 12 hours of engaging online content. Results revealed that participants showed increased scores on measures relating to both ability and trait-based emotional intelligence, namely on recognizing emotions, understanding emotions, managing emotions of others, and using and managing emotions strategically. Furthermore, tests were conducted again six months after the training, showing a persistence of the positive results. Findings by Held *et al*. (2023) also reveal the positive effects of online EI training by using an extended version of the Web-Based Emotional Intelligence Training (WEIT 2.0) program. With a focus on increasing emotion perception and emotion regulation skills, results showed significantly positive results on those skills after eight weeks. Despite online

training not being the chosen training method for this study, the results of the above-mentioned studies indicate that emotional intelligence training can assume different formats and still produce positive results, which reinforces the effectiveness of this type of training.

Effective leadership is key when dealing with public health and safety crises (Hadley *et al*., 2009), such as the one that have risen over the past years. Crisis leaders deal with decision-making under very demanding conditions, both psychologically and physically (Klann, 2003; Leonard, 2004). It is, thus, worth analyzing if emotional intelligence training affects crisis leadership.

Mackinnon *et al*. (2013) states that self-efficacy can be a relevant factor when assessing one's performance in crisis situations. Given that self-efficacy is described by Bandura (1986) as the individual's belief in their own capability to perform a task with success and that McQuiggan *et al*. (2008) and Stajkovic & Luthans (1998) suggest that it is a factor that can be influenced with training, self-efficacy can be an efficient tool used to assess performance in crisis situations. Thus, to assess if emotional intelligence training can affect crisis performance, self-efficacy levels will be analyzed. The impact of self-efficacy has been researched across different areas. Honicke & Broadbent (2015) studied self-efficacy in the academic context, finding a moderate correlation between academic self-efficacy and academic performance, while Stajkovic & Luthans (1998) found a significant correlation between self-efficacy and work-related performance.

By analyzing the literature on these topics, it can be assessed that emotional intelligence and self-awareness training can produce promising results, as well as self-efficacy training. Considering Nguyen *et al*.'s study (2023) with students amidst the Covid-19 health crisis, it is thus interesting to evaluate if a training on self-awareness can increase self-efficacy levels, indicating an improved performance under crisis situations.

3. Training Methods and Structure

The goal of the training session is to understand if a training workshop on self-awareness is effective in improving the trainees' emotional intelligence and their performance in crisis situations.

To evaluate self-awareness, the **Wong and Law Emotional Intelligence Scale** (2002) was used, which is a self-report emotional intelligence scale consisting of sixteen items rated on a 7-point Likert scale and divided into four subscales: Self-Emotional Appraisal (SEA), Other's Emotional Appraisal (OEA), Regulation of Emotion (ROE), and Use of Emotion (UOE). The scale has been shown to have satisfactory levels of validity and reliability (Wong and Law, 2002). This tool has been proven effective in measuring self-awareness in multiple training studies, such as the ones by Fattah *et al.* (2023) and Held *et al.* (2023). (Please refer to Appendix 1 for the questions.)

To evaluate self-efficacy, **Assessing and Deciding (C-Lead) Scale** (Hadley *et al.*, 2009) was used, which Mackinnon *et al.* (2013) uses to assess Crisis Leader Efficiency and consists of nine items rated on a 7-point Likert scale. Leaders are then classified into two different levels of self-efficacy, low and high. Hadley *et al.* (2009) indicate that this measure has strong validity and reliability. (Please refer to Appendix 2 for the questions.)

Given the short duration of the workshop, the tools used are adequate because they do not require extensive time to be answered.

The participants were asked to respond to the two questionnaires three times: one at the beginning of the session, one at the end, and a final time one week after the training session, using a pre-training, training and post-training method suggested by Salas et al. (2012). Evaluating at different points in time allows for conclusions to be reached regarding the effectiveness of the workshop.

Additionally, for statistical analysis, demographic questions (age, gender, nationality, and program of study) were included in the questionnaires. The second questionnaire (at the end of the sessions) included three multiple choice questions about the content of the workshops, to assess if the contents were well understood by the participants. Moreover, at the end of the second questionnaire of the session, a suggestion box for improvements to the workshop was included.

The workshops were focused on group discussions and interactive participation, considering that Hodzic *et al*. (2017) suggests that the most effective trainings analyzed on the topic were based on that methodology.

The sessions were held during the Organizational Communication class of third year Human Resources Management bachelor's degree students of Setúbal Polytechnic University. The sessions occurred on the 3rd and 4th of April 2024. The intended control group was composed of students enrolled in the same school and degree in the evening program (as opposed to daytime for the treatment group).

After the initial questionnaire, to ensure the participants were actively interested in the contents and discussion, the relevance of the workshop was highlighted, with an emphasis on the benefits of emotional intelligence and its training indicated by research, the importance of emotional intelligence skills when navigating the current times of uncertainty, and the added value that self-awareness and emotional intelligence can bring to human resources professionals, given that all the participants were Human Resources Management students.

As an introduction to participation and as an icebreaker, trainees were asked to briefly introduce themselves, indicating their name and if they considered themselves to be self-aware.

As a first interactive activity, trainees were handed post-it papers and were asked to write their understanding of emotional intelligence and self-awareness and, to introduce dynamic, stick their post-its to the whiteboard. A brief discussion followed, focusing on the similarities of the definitions of the two concepts given by the students.

Following, some definitions of emotional intelligence and self-awareness were shared, highlighting the fact that self-awareness is one component of emotional intelligence.

The trainings assumed the form of a "generic self-awareness workshop" (Development and Learning in Organizations, 2016), with emphasis on the three methods described by Wilson and Dunn (2004): structured introspection, seeing oneself through other's eyes, and self-observation. The three methods were briefly explained, and each included an activity.

Regarding the introspection activity, it was based on the TEDx Talk by Tasha Eurich "Increase your self-awareness with one simple fix". Participants were asked to answer on Mentimeter which question they considered more beneficial for introspection "what?" or "why?". Following, the segment of Ted Talk regarding the dangers of asking "why?" and the benefits of asking "what?" was shown. A discussion about the video and the answers followed, focusing on the reasons behind the answers, if the video was surprising, and if it changed their view.

For seeing oneself through other's eyes, participants were asked to share on Mentimeter four adjectives regarding how they described themselves and how the three people closest to them would describe them. Following, a discussion occurred, with emphasis on the reasons behind the differences between how we describe ourselves and how others describe us.

Regarding self-observation, participants were encouraged to think about the previous two days and register on Mentimeter the three main emotions or thoughts that were present on those days. A

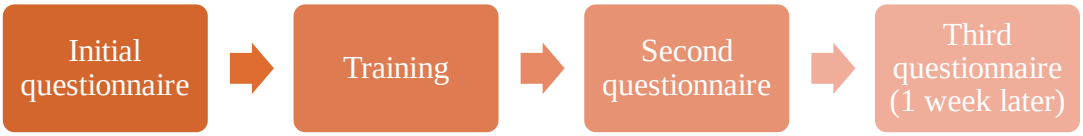
discussion about the exercise followed, focusing on whether trainees were previously aware of those emotions or thoughts and the benefits of that awareness in day-to-day situations. In this activity, the Mentimeter tool is especially relevant because, besides the dynamic factor it provides, it allows for anonymity when sharing potential personal and vulnerable information (e.g., emotions) with colleagues.

As the last interactive activity, trainees were asked to write on three post-its something they enjoyed about the session, something that they would not forget and something that could be improved. Similar to the first post-it activity, students placed the papers on the whiteboard. A brief discussion of the feedback followed, to allow participants to share some thoughts about the session with colleagues (if they wished to do so). The second questionnaire included a suggestion box in order for trainees to share feedback that they were not comfortable to share with the class.

The students were then asked to answer the second questionnaire, as well as reminded of the importance of answering the third and last questionnaire.

To wrap-up the session, a handout was distributed, including the key points of the workshop and some practical tips to increase emotional intelligence and self-awareness.

Figure 1 - Timeline



4. Results

4.1 Analysis

This section will analyze the characteristics of the participants in the study, the results obtained in the questionnaires before and after the workshops, and the feedback provided by trainees.

4.1. Instruments

To evaluate students' emotional intelligence levels, the Wong and Law Emotional Intelligence Scale (WLEIS) was used, while to analyze participants' self-efficacy levels, the Assessing and Deciding (C-Lead) Scale, as described in the previous section. The statistical analysis performed was done using IBM SPSS Statistics Version 29.0.2.0 (20). The software was used to perform normality tests on the data and non-parametric Friedman tests of differences among repeated measures. This test was selected to conduct this analysis, due to being a non-parametric test adequate to analyze repeated measures in different points in time (IBM, 2021). To study the demographics, Microsoft Excel Version 16.84 was used. (Please refer to Appendices 7, 11 and 12 for more information on the instruments used.)

4.2. Normality Tests

By performing normality tests on the data, considering a 95% confidence interval (thus, .05 significance level), the Kolmogorov-Smirnov test points to normality in the six variables, (WLEIS

in questionnaires 1, 2, and 3, and C-Lead Scale in questionnaires 1, 2, and 3), given that the p-value is higher that .05. When looking at the Shapiro-Wilk test, it can be assessed that five variables are normally distributed (p-value > .05), except for the C-Lead Scale data in the third questionnaire, which has a p-value equal to .006, hence, lower than .05. Given that one variable is not normally distributed, non-parametric tests were performed to analyze the data.

Table 2 - Normality Tests

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	**df**	**Sig.**	**Statistic**	**df**	**Sig.**
WLEIS_QUEST1	.144	16	.200	.972	16	.869
WLEIS_QUEST2	.108	16	.200	.943	16	.382
WLEIS_QUEST3	.122	16	.200	.958	16	.619
CLEAD_QUEST1	.135	16	.200	.944	16	.395
CLEAD_QUEST2	.080	16	.200	.981	16	.972
CLEAD_QUEST3	.170	16	.200	.824	16	.006

4.3. Demographics

4.3.1. Treatment Group

A total of thirty-two participants attended the workshops. All the trainees were third-year Human Resources Management bachelor's students at Setúbal Polytechnic University. Approximately 72% of participants identified as female, and approximately 28% identified as male. Ages ranged from 20 to 49 years old (M = 23.06 years; SD = 5.91 years). Additionally, all the participants were Portuguese. (Refer to Appendix 8 for graphical representation of demographic characteristics.)

All thirty-two participants answered the first questionnaire. Regarding the second questionnaire, thirty participants answered, which represents a 94% retention rate from the first to the second questionnaire. However, a 53% retention rate was verified from the second to the third and last

questionnaire, giving that only sixteen participants answered. Hence, the overall retention rate from the first to the last questionnaire was 50%. This phenomenon is described by Jurs and Glass (1971) as experimental mortality, which is the loss of treatment group members. For the following analysis, the treatment group is composed by the sixteen people that answered the three questionnaires.

4.3.2. Control Group

For the control group, eight people answered the first questionnaire and out of those, only two were retained for the second questionnaire. Due to the reduced number of answers and experimental mortality, a control group could not be considered for this study, despite the efforts made by e-mailing the students multiple times.

4.4. Knowledge

The second questionnaire included three multiple choice questions in order to assess participant's understanding of the main topics explored in the sessions. In the first question, "What are the two types of EI highlighted in the literature?", 44% of the treatment group answered correctly. The second question, "Which factor is not associated with self-awareness development?" was answered correctly by 81% of the group. In the last question, "Which is one of the main benefits of self-awareness?", 94% of the group selected the right answer. These results lead to the belief that the topics discussed in the workshops were well understood. (Please refer to Appendix 9 for graphical representation of knowledge results.)

4.5. WLEIS

The mean result for the WLEIS questions was, approximately, 5.23 in the first questionnaire, 5.13, in the second questionnaire, and 4.99 in the last questionnaire. By looking at the evolution of the means, an increase in the measures is not verified.

The non-parametric Friedman test of differences among repeated measures performed resulted in $\chi 2_{(2, 16)} = .677$, $p = .713$. Assuming a significance level of .05, the p-value ($p = .713$) is higher than the significance level, thus indicating that the null hypothesis (the workshops did not increase participants' emotional intelligence levels) cannot be rejected and, therefore, there is **no significant differences between the dependent groups**. (Refer to Appendix 12 for more information on statistical values.)

Table 3 - Test Statistics WLEIS

N	***Chi-Square***	***df***	***p-value***
16	.677	2	.713

When analyzing the four components of the WLEIS separately by performing the same test, the same conclusion was obtained for all the components, Self-Emotional Appraisal ($p = .683$), Other's Emotional Appraisal ($p = .678$), Regulation of Emotion ($p = .122$), and Use of Emotion ($p = .223$). Therefore, the null hypothesis cannot be rejected, and the differences found are **not statistically significant**. (Refer to Appendix 12 for more information on statistical values.)

Table 4 - Test Statistics WLEIS Components

	N	***Chi-Square***	***df***	***p-value***
Self-Emotional Appraisal	16	.764	2	.683
Other's Emotional Appraisal	16	.778	2	.678
Regulation of Emotion	16	4.203	2	.122
Use of Emotion	16	3.000	2	.223

Observing the evolution of the answers along the different moments, it can be assessed that largest positive change was verified in question 10 (*I always tell myself I am a competent person.*) from questionnaire 2 to 3 with a 13.65% change. The Friedman test for this specific question resulted in $\chi^2_{(2, 16)} = 3.405$, $p = .182$, that is, the difference is **not statistically significant**.

The largest negative difference can be seen in question 14 (*I am quite capable of controlling my own emotions.*) from questionnaire 1 to 3, with 16.09%. The Friedman test for question 16 resulted in $\chi^2_{(2, 16)} = 6.837$, $p = .033$. Therefore, the difference is **statistically significant**. (Please refer to Appendix 10 to see the table with the percentage change in each question along the stages.)

Table 5 - Test Statistics WLEIS Question 14

N	***Chi-Square***	***df***	***p-value***
16	6.837	2	.033

4.6. C-Lead Scale

Looking at the mean results for the C-Lead Scale questions, in the first moment of testing the mean was of 4.88, in the second moment 4.69, and in the third moment 4.99.

The non-parametric Friedman test of differences among repeated measures performed resulted in $\chi^2_{(2, 16)} = 3.309$, $p = .191$. Assuming a significance level of .05, the null hypothesis (the workshops

did not increase participants' self-efficacy levels) cannot be rejected and, therefore, there is **no significant differences between the dependent groups**. (Refer to Appendix 12 for more information on statistical values.)

Table 6 - Test Statistics C-Lead Scale

N	***Chi-Square***	***df***	***p-value***
16	3.309	2	.191

Assessing the evolution of the C-Lead Scale answers, the highest positive change can be verified in question 9 (*I can modify my regular work activities instantly to respond to an urgent need.*) from moment 2 to 3, with 17.14%. The most accentuated negative change was detected in the same question, from moment 1 to moment 2, with 23.91% (refer to Appendix 10 to see the table with the percentage change in each question along the stages). The Friedman test performed for question 9 revealed that $\chi^2_{(2,\ 16)} = 13.064$, $p = .001$, which indicates that the differences found in this question are **statistically significant**. Given that there was an increase and a subsequent decrease, the results are ambiguous. (Please refer to Appendix 12 for more information on statistical values.)

Table 7 - Test Statistics C-Lead Scale Question 9

N	***Chi-Square***	***df***	***p-value***
16	13.064	2	.001

4.7. Feedback

The comments provided by trainees regarding the session were, overall, very positive. The interactive and dynamic activities were positively highlighted, and the TEDx Talk presented was what participants indicated the most as something they will not forget about the session. As for points of improvement, in the first session participants pointed out the fact that the TEDx video

did not have Portuguese subtitles (which was corrected for the second workshop), in the second session a few participants found the questionnaires too long. (Please refer to Appendix 5 for participants' written feedback.)

5. Discussion

5.1. Effectiveness

The feedback indicates that the workshops were well-received and appreciated by the students. In the second session, slight adjustments were made based on the acknowledgement of what could be improved from the first session, namely having Portuguese subtitles in the TEDx video, and improving silent management.

The statistical results obtained do not allow to conclude that the workshops were effective in improving the trainee's overall emotional intelligence levels nor their overall self-efficacy levels. However, statistical significance was found in the WLEIS question "I am quite capable of controlling my own emotions.", with a 16.09% decrease, which may indicate that the workshop made participants more aware of the fact that they were not as capable of controlling their emotions as they initially considered, that is, the training made students reflect on and be more aware of their emotional capabilities, which can suggest self-awareness development.

Regarding self-efficacy levels, statistical significance was found in the question "I can modify my regular work activities instantly to respond to an urgent need." However, this result is ambiguous given that there was a decrease followed by an increase. There are different factors that can be pointed that may have originated such results.

5.2. Relevance and Implications for Management

Despite significant statistical differences not being found, the students' feedback about the workshop was very positive. Moreover, the participants were encouraged to reflect on a topic that the literature indicates is relevant. The students are in the last year of their bachelor's degree, which indicates that most are close to entering the job market, given that Law *et al*. (2004) state that emotional intelligence is an important predictor of job performance, having contact with emotional intelligence-based materials can prove very relevant for this group of participants. Specifically, the trainees are Human Resources Management students, which may hint to the fact that their career will involve working closely with other individuals. This career may benefit from emotional intelligence knowledge, given that understanding other's emotions is a part of emotional intelligence (Nguyen *et al*., 2023). Additionally, Robles (2012) shows that soft skills account for 75% of long-term career performance, making it especially relevant for students about to enter the job market to develop these skills.

Considering that leaders with increased levels of self-awareness have a tendency to be more effective and create greater satisfaction among the people they lead (Atwater *et al*., 1995), as well as the fact that self-awareness seems to have a positive association with job-related well-being (Sutton *et al*., 2015), the students having a positive contact with self-awareness contents can have a positive influence on their leadership skills. It is not uncommon that senior management teams disregard crisis management until crisis happen (Dogaru *et al*., 2023), however, companies must respond and adapt with agility when unfavorable conditions arise (Kulinich *et al*., 2023). Taking into consideration the unpredictable modern world, effective leadership can benefit companies when dealing with such circumstances, therefore, training in emotional intelligence and self-awareness can be a relevant tool for organizations that need more effective methods and programs

when facing unpredictable changes and crisis. Given that self-efficacy can be an important tool to assess performance in crisis situations (Mackinnon *et al*., 2013), organizations should also take into account self-efficacy training and development when considering crisis management.

Furthermore, crisis situations can be emotionally challenging to individuals (Dogaru *et al*., 2023), which suggest that developing emotional intelligence skills can be beneficial when navigating such circumstances.

5.3. Recommendations for Further Research

For future research of this nature, considering the challenges found in this research, some recommendations can be made.

The sample size for this study (16 students responded to the three questionnaires) was relatively small. A small number of responses can lead to unreliability of results, due to the higher variability it brings (Simmons, 2018). The results can, thus, be biased.

Experimental mortality should be taken into consideration when assessing the study, given that the overall retention rate from the first to the last questionnaire was 50%. This phenomenon contributed to the small sample size obtained and, therefore, to the biases that may have occurred. When raising interest from participants, the highlight was put on the relevance of the topic to Human Resources Management students and professionals, however, it would be interesting to assess if giving more insights on the research can aid in lessening experimental mortality.

This study did not include a control group, despite the efforts made to obtain a similar sized sample to the treatment group, with similar characteristics (Human Resources Management third-year bachelor's students). The target control group received communications about the surveys along the weeks of data collection, however, those communications were unsuccessful given that only

two respondents answered both questionnaires. The lack of a control group greatly hinders the ability to draw meaningful conclusions because the differences found in a specific study can be the result of other factors other than the treatment. In the case of this study, no overall statistically significant differences were found, however, a control group would have provided a more complete analysis. In the future, it could be important to target a control group larger than the treatment group, to try to guarantee a control group at least as large as the treatment group. Also, incentivizing participation by doing, for example, a raffle for those who answered could be a powerful way of securing a solid control group.

The treatment group was subject to a single workshop that lasted around one hour. When comparing to other studies, Venkatesh *et al*. conducted a half-day activity, and Costa *et. al* (2021) based their study on two courses that lasted one academic semester. Extending the time participants were under training could have proved more effective, for example, having multiple sessions over a longer timeframe.

From the day students were given the training to the day they were asked to fill the last questionnaire, one week passed. Venkatesh *et al*. (2021) administered the last questionnaire on month after the completion of the workshop, and for Costa *et al*. (2021) the timeframe was fourteen weeks. Therefore, a longer timeframe could have been beneficial to assess the effects of the self-awareness training. Three questionnaires were administered in the span of one week, which could have felt repetitious to some students.

It is also worth it to reflect on the fact that the training was not developed based on self-efficacy elements, only on emotional intelligence and self-awareness concepts. Therefore, even though there might seem to be an intuitive relationship between emotional intelligence development and self-efficacy, perhaps the training design should be directed to self-efficacy to lead to positive

results. Furthermore, for inexperienced trainers, using a standard training design on the topics could produce more satisfactory results. Given that self-efficacy is shown to be correlated with academic performance (Honicke & Broadbent, 2015) and work-related performance (Stajkovic & Luthans, 1998), interventions directed at students and soon-to-be professionals are encouraged, since these groups can be likely benefit from effective training on the subject.

6. Conclusion

This study intended to assess if a workshop on self-awareness could improve Human Resources Management students' levels of emotional intelligence and self-efficacy. An increase in self-efficacy levels could lead to the belief that performance in crisis situations was also improved, since according to Mackinnon *et al.* (2013), self-efficacy can be relevant when assessing this performance.

Trainees answered three questionnaires (one before the session, one immediately after the session and one a week after the session), which were based on the Wong and Law Emotional Intelligence Scale (2002) and the Assessing and Deciding (C-Lead) Scale (Hadley *et al.*, 2009).

Statistical analysis did not reveal that the workshop was successful in increasing students' overall levels of emotional intelligence and self-efficacy. Therefore, with this research, it cannot be concluded that this training on self-awareness increases self-efficacy levels and, thus, performance in crisis situations. Nevertheless, statistical significance was found in some of the items of the questionnaires, which encourages further research on topic, considering carefully the challenges faced in this study.

Some limitations of this paper could be addressed in future research on this topic, such as obtaining a larger sample size, guaranteeing a control group, applying measures to avoid such high experimental mortality, and performing more than one session over a longer timeframe.

Despite not obtaining statistically significant differences in the study, students overall provided very positive feedback on the sessions and actively participated in the discussion.

The world today is unstable, which makes effective leadership a key topic to be researched (Kulinich *et al*., 2023), namely crisis leadership, so that companies can develop more efficient ways to deal with unpredictability. Thus, self-efficacy also becomes a key concept, due to its potential to assess performance in crisis situations (Mackinnon *et al*., 2013). Furthermore, in the current competitive business environment, soft skills such as emotional intelligence and leadership contribute to add value to organizations, allowing for more effective companies (Muindi *et al*., 2022), it is thus crucial for businesses to consider the development of such skills to enhance organizational performance and drive organizational success.

As the literature suggests that both emotional intelligence and self-efficacy can be influenced by training, the relationship between emotional intelligence and crisis leadership can be an interesting topic to be further studied as a tool to equip managers with better crisis management capabilities.

7. References

Coombs, W. Timothy. 2015. “CSR as Crisis Risk.” *Corporate Communications: An International Journal* 144-162.

Costa, Mariana Gomes, Luísa Helena Pinto, Helena Martins, e Diana Aguiar Vieira. 2021. “Developing psychological capital and emotional intelligence in higher education: A field experiment with economics and management students.” *The International Journal of Management Education.*

Creel, Timothy, Marcy Binkley, e Susan Galbreath. 2023. “The Growing Importance of Teaching Soft Skills in Accounting Classes.” *Journal of Accounting and Finance.*

Dogaru, Irina, Florentina-Mirela Marinescu, e Isbaita Iyad. 2023. “Entrepreneurial Crisis Strategies for the Organizations of the Future.” *Sciendo.*

Durham, Michelle R. Persich, Ryan Smith, Sara Cloonan, Lindsey L. Hildebrand, Rebecca Woods-Lubert, Jeff Skalamera, Sarah M. Berryhill, et al. 2023. “Development and validation of an online emotional intelligence training program.” *Frontiers in Psychology.*

Fattah, Hadya Abboud Abdel, Gehan Karawan Sallam, Abdelaziz Said Hendy, Ahmed Abozeid, e Nigel Rodenhurst. 2023. “The Beneficial Effects of Emotional Intelligence Training for Critical Care Nurses on Job Burnout: A Quasi-Experimental Study.” *Iranian Journal of Nursing and Midwifery Research.*

Hadley, Constance Noonan, Todd L. Pittinsky, S. Amy Sommer, e Zhu Weichun. 2009. “Measuring the Efficacy of Leaders to Assess Information and Make Decisions in a Crisis: The C-LEAD Scale.” *The Leadership Quarterly.*

Held, Marco Jürgen, Theresa Fehn, Iris Katharina Gauglitz, e Astrid Schütz. 2023. “Training Emotional Intelligence Online: An Evaluation of WEIT 2.0.” *Journal of Intelligence* 122.

Hodzic, Sabina, Heinz Holling, Jana Scharfen, Pilar Ripoll Botella, e Franck Zenasni. 2018. “How Efficient Are Emotional Intelligence Trainings: A Meta-Analysis.” *Emotion Review* 138-148.

Honicke, Toni, e Jaclyn Broadbent. 2015. “The influence of academic self-efficacy on academic performance: A systematic review.” *Educational Research Review* 63-84.

IBM. 2021. *SPSS Statistics Friedman Tests.* Acedido em 25 de April de 2024. https://www.ibm.com/docs/en/spss-statistics/beta?topic=tests-friedman-test- .

Islam, Robiul, Happy Kumar Das, e Monjurul Islam. 2023. “Soft Skills for Employability: Exploring English Graduates' Awareness and Practices in Bangladesh.” *i-manager’s Journal on English Language Teaching* .

Jurs, Stephen G., Gene, V Glass. 1971. “The Effect of Experimental Mortality on the Internal and External Validity of the Randomized Comparative Experiment.” *The Journal of Experimental Education 40, no. 1* 62-66.

Kong, Feng. 2017. “The validity of the Wong and Law Emotional Intelligence Scale in a Chinese sample: Tests of measurement invariance and latent mean differences across gender and age.” *Personality and Individual Differences.*

Kulinich, Tetiana, Olha Materynska, Yuliia Aleskerova, Hanna Kuzmenko, e Izolda Balian. 2023. “Leadership in Unstable Conditions: Change Management Strategies and Effective

Crisis Management for Achieving Success." *WSEAS Transactions on Business and Economics.*

Mackinnon, Lachlan, Liz Bacon, Gabriella Cortellessa, e Amedeo Cesta. 2013. "Using Emotional Intelligence in Training Crisis Managers: The Pandora Approach." *International Journal of Distance Education Technologies* 66-95.

Nguyen, Ngoc Nhu, Tuan Phong Nham, e Yoshi Takahashi. 2023. "Relationship between emotional intelligence and resilience among university students during crisis." *Sage Journals.*

2016. "Reaping rewards of self-awareness: Training delivers confidence and understanding." *Development and Learning in Organizations* 24-26.

Simmons, A. E. 2018. *The Disadvantages of a Small Sample Size.* 14 de May. Acedido em 25 de April de 2024. https://sciencing.com/disadvantages-small-sample-size-8448532.html.

Stajkovic, Alexander D., e Fred Luthans. 1998. "Self-Efficacy and Work-Related Performance: A Meta-Analysis." *Psychological Bulletin* 240-261.

Sutton, Anna, Helen M Williams, e Christopher W Allinson. 2015. "A longitudinal, mixed method evaluation of self-awareness training in the workplace." *European Journal of Training and Development.*

TEDxMileHigh. 2017. *Increase your self-awareness with one simple fix | Tasha Eurich | TEDxMileHigh.* 19 de December. https://www.youtube.com/watch?v=tGdsOXZpyWE.

Van der Westhuizen, Sanet. 2005. “Measuring Emotional Intelligence (EQ): A construct comparison between the BAR-ON EQi and the OPQ 32i Report.” *Southern African Business Review* 34-50.

Venkatesh, Hemamalini, Jyothi H. P., e Pradeep Kumar P. C. 2023. “Effectiveness of self-awareness training for young adults on improving their professional skills: a Quasi-experimental study.” *International Journal Of Community Medicine And Public Health.*

Wilson, Timothy D., e Elizabeth Dunn. 2004. “Self-Knowledge: Its Limits, Value, and Potential for Improvement.” *Annual Review of Psychology.*

Appendix

Appendix 1 *- Wong and Law Emotional Intelligence Scale (WLEIS)*

1. I have a good sense of why I feel certain feelings most of the time.
2. I have a good understanding of my own emotions.
3. I really understand what I feel.
4. I always know whether I am happy or not.
5. I always know my friends' emotions from their behavior.
6. I am a good observer of others' emotions.
7. I am sensitive to the feelings and emotions of others.
8. I have a good understanding of the emotions of people around me.

9. I always set goals for myself and then try my best to achieve them.
10. I always tell myself I am a competent person.
11. I am a self-motivating person.
12. I would always encourage myself to try my best.
13. I am able to control my temper so that I can handle difficulties rationally.
14. I am quite capable of controlling my own emotions.
15. I can always calm down quickly when I am very angry.
16. I have good control of my emotions.

Appendix 2 *- C-Lead Scale*

1. I can anticipate the political and interpersonal ramifications of my decisions and actions.
2. I can summarize the key issues involved in a situation to others regardless of how much data I have.
3. I can make decisions and recommendations even when I don't have as much information as I would like.
4. I can assess how the members of the general public are being impacted by my unit's actions or inactions during times of adversity.
5. I can determine which information is critical to relay to other units in advance of them requesting it.
6. I can keep others abreast of my work activities without over-informing or under-informing them.
7. I can make decisions and recommendations even under extreme time pressure.

8. I can estimate the potential deaths and injuries that may occur as the result of my decisions or recommendations at work.
9. I can modify my regular work activities instantly to respond to an urgent need.

Appendix 3 *- Training Slides*

Agenda

01 Questionário inicial

02 Relevância do tópico

03 Conceitos teóricos

04 Introspeção

05 Pelos olhos dos outros

06 Auto-observação

07 Feedback

08 Questionário final

Questionário 1

Por que é que o tema é relevante?

Vantagem competitiva

- Sucesso académico
- Empregabilidade e sucesso profissional

Contexto atual

- Incerteza
- Constante mudança

Treino

- Eficaz

SEREI AUTO-CONSCIENTE?

Inteligência emocional

"Capacidade de processar informações emocionais e aplicá-las na tomada de decisões" (Mayer and Salovey, 1997)

Habilidade

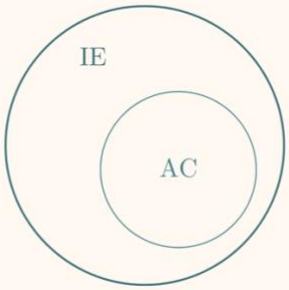
"Característica individual que contém uma composição de disposições e habilidades autopercebidas" (Petrides and Furnham, 2003)

Característica

"A inteligência emocional abrange a capacidade de compreender emoções profundas e expressá-las de maneira natural, compreender as emoções dos outros, usá-las e regulá-las de forma eficaz de uma forma que facilite a recuperação de desafios psicológicos." (Nguyen *et al.*, 2023)

Auto-consciência

"Capacidade individual do indivíduo de reconhecer os seus próprios pontos fortes e fracos." (Venkatesh *et al.*, 2023)



Introspeção

Associação positiva com saúde, desempenho académico e sucesso profissional

Pelos olhos dos outros

Benefícios de reconhecer a forma como os outros nos descrevem

Auto-observação

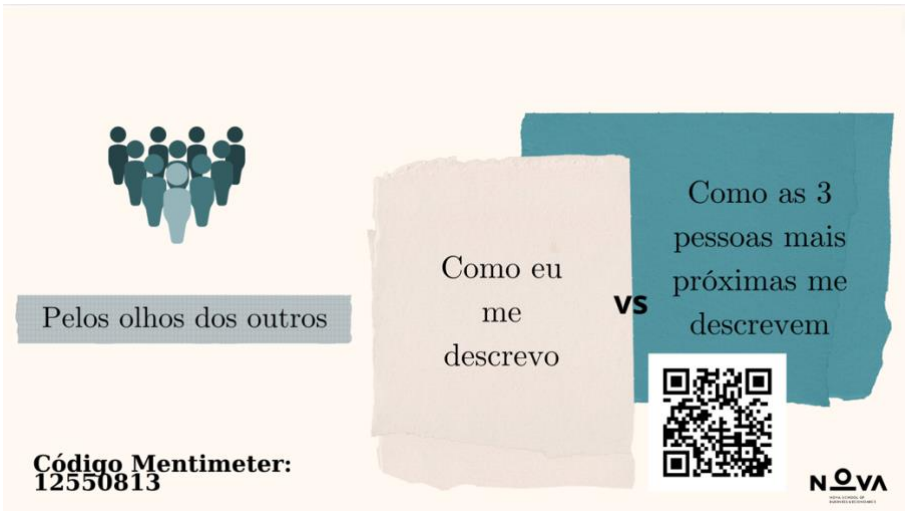
Alinhar objetivos conscientes e inconscientes

Introspeção

O quê?

Porquê?

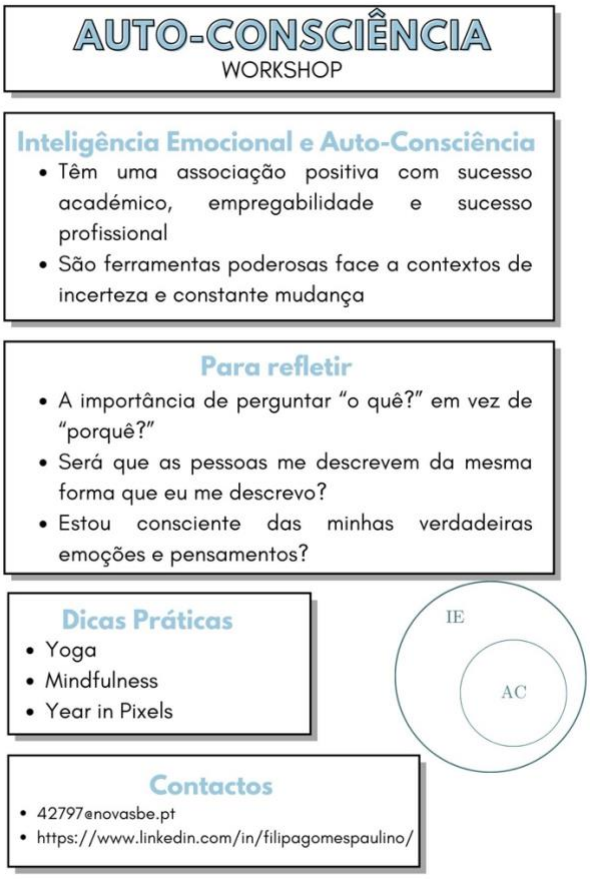
Código Mentimeter: 12550813


Pelos olhos dos outros
Como eu me descrevo
VS
Como as 3 pessoas mais próximas me descrevem
Código Mentimeter: 12550813

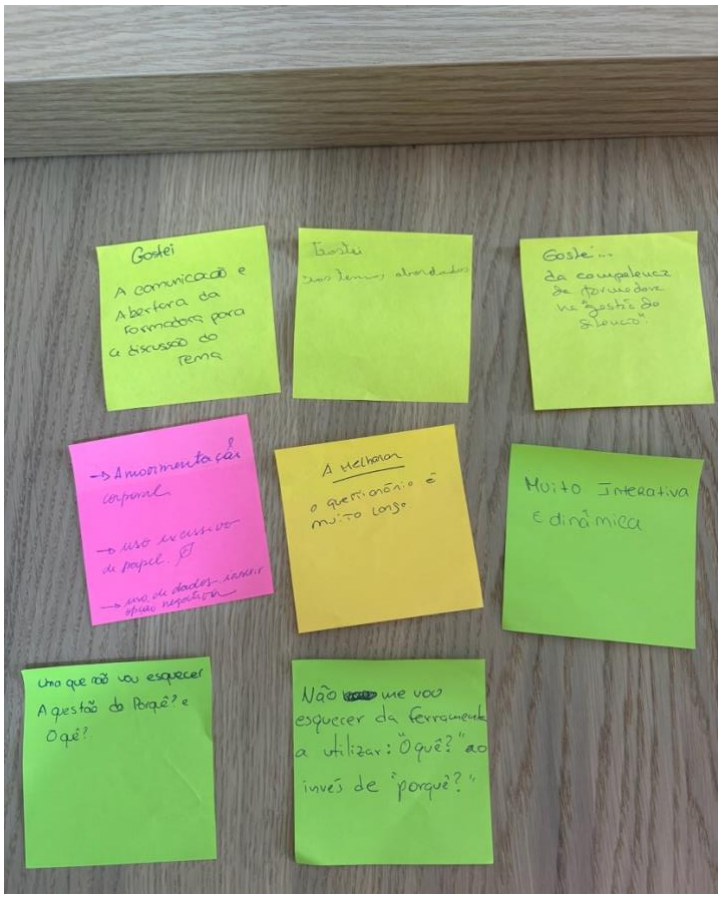

Auto-observação
3 emoções/pensamentos nos últimos 2 dias
Código Mentimeter: 12550813


GOSTEI
NÃO VOU ESQUECER
A MELHORAR

Appendix 4 - *Handout*



Appendix 5 *- Examples of Feedback Provided by Participants*



Appendix 6 *- Questionnaire*

Auto-consciência e situações de crise - Questionário 2

Olá! O meu nome é Filipa e preciso da vossa ajuda para concluir o meu mestrado em Gestão ☺

Para isso, peço que respondam de forma honesta às perguntas deste questionário para que possa desenvolver a minha tese com base nos temas da auto-consciência e liderança em situações de crise.

Obrigada pela vossa colaboração!

1. Autorizo a recolha e tratamento dos dados fornecidos neste questionário para fins de desenvolvimento de dissertação de mestrado. *

   ◯ Sim

2. E-mail *

   Introduza a sua resposta

3. Nome *

   Introduza a sua resposta

4. Idade *

   Introduza a sua resposta

5. Género *

5. Género *

- ◯ Feminino
- ◯ Masculino
- ◯ Outro

6. Nacionalidade *

Introduza a sua resposta

7. Curso *

Introduza a sua resposta

8. Quais os 2 tipos de inteligência emocional que se distinguem na literatura? *

- ◯ Habilidade e consciência
- ◯ Habilidade e característica
- ◯ Característica e consicência

9. Que fator NÃO está tipicamente associado com o desenvolvimento da auto-consciência? *

- ◯ Interação social e feedback por parte de outros
- ◯ Técnicas de introspeção
- ◯ Mínima exposição a experiências diversas

10. Qual um dos principais benefícios da auto-consciência? *

10. Qual um dos principais benefícios da auto-consciência? *

- ◯ Maior capacidade de controlar as ações do outro
- ◯ Maior empatia e compreensão do outro
- ◯ Menor necessidade de interação social

11. Escala de Inteligência Emocional Wong and Law (WLEIS) *

	Discordo totalmente	Discordo	Discordo parcialmente	Neutro	Concordo parcialmente	Concordo	Concordo totalmente
1. Na maioria das vezes eu sei por que tenho certos sentimentos.	◯	◯	◯	◯	◯	◯	◯
2. Tenho uma boa compreensão das minhas próprias emoções.	◯	◯	◯	◯	◯	◯	◯
3. Compreendo realmente o que sinto.	◯	◯	◯	◯	◯	◯	◯
4. Sei sempre se estou ou não feliz.	◯	◯	◯	◯	◯	◯	◯
5. Conheço sempre as emoções dos meus amigos através dos seus comportamentos.	◯	◯	◯	◯	◯	◯	◯
6. Sou um bom observador das emoções dos outros.	◯	◯	◯	◯	◯	◯	◯
7. Sou sensível aos sentimentos e emoções dos outros.	◯	◯	◯	◯	◯	◯	◯
8. Tenho uma boa compreensão das emoções das pessoas que me rodeiam.	◯	◯	◯	◯	◯	◯	◯
9. Estabeleço sempre metas para mim e tento fazer o melhor para alcançá-las.	◯	◯	◯	◯	◯	◯	◯

10. Digo sempre a mim mesmo que sou competente.	○	○	○	○	○	○	○
11. Sou uma pessoa auto-motivadora.	○	○	○	○	○	○	○
12. Encorajo-me sempre a fazer o meu melhor.	○	○	○	○	○	○	○
13. Sou capaz de controlar o meu temperamento para gerir as dificuldades de forma racional.	○	○	○	○	○	○	○
14. Sou capaz de controlar as minhas próprias emoções.	○	○	○	○	○	○	○
15. Consigo acalmar-me facilmente quando me sinto zangado.	○	○	○	○	○	○	○
16. Tenho um bom controlo das minhas próprias emoções.	○	○	○	○	○	○	○

12. Escala C-Lead *

	Discordo totalmente	Discordo parcialmente	Discordo	Neutro	Concordo	Concordo parcialmente	Concordo totalmente
1. Consigo antecipar as ramificações políticas e interpessoais das minhas decisões e ações.	○	○	○	○	○	○	○
2. Consigo sintetizar para outras pessoas as principais questões envolvidas numa situação, independentemente da quantidade de dados que possuo.	○	○	○	○	○	○	○
3. Consigo fazer decisões e recomendações mesmo quando não tenho tanta informação quanto gostaria.	○	○	○	○	○	○	○
4. Consigo avaliar como é que os membros do público em geral estão a ser impactados pelas ações ou falta de ações	○	○	○	○	○	○	○

4. Consigo avaliar como é que os membros do público em geral estão a ser impactados pelas ações ou falta de ações da minha unidade em tempos de adversidade.	○	○	○	○	○	○	○
5. Consigo determinar que informações são críticas para transmitir a outras unidades antes que elas as solicitem.	○	○	○	○	○	○	○
6. Consigo manter os outros informados sobre as minhas atividades profissionais sem os informar demasiado ou mal.	○	○	○	○	○	○	○
7. Consigo fazer decisões e recomendações mesmo sob extrema pressão temporal.	○	○	○	○	○	○	○
8. Consigo estimar as potenciais mortes e lesões que podem ocorrer como resultado das minhas decisões ou recomendações no trabalho.	○	○	○	○	○	○	○
9. Consigo modificar instantaneamente as minhas atividades regulares para responder a uma necessidade urgente.	○	○	○	○	○	○	○

13. Sugestões/comentários ☺

Introduza a sua resposta

Note: Questionnaires 1 and 3 are identical to questionnaire 2, except they do not include knowledge questions and the suggestion box.

Appendix 7 - *Data Treatment in Microsoft Excel*

WLEIS

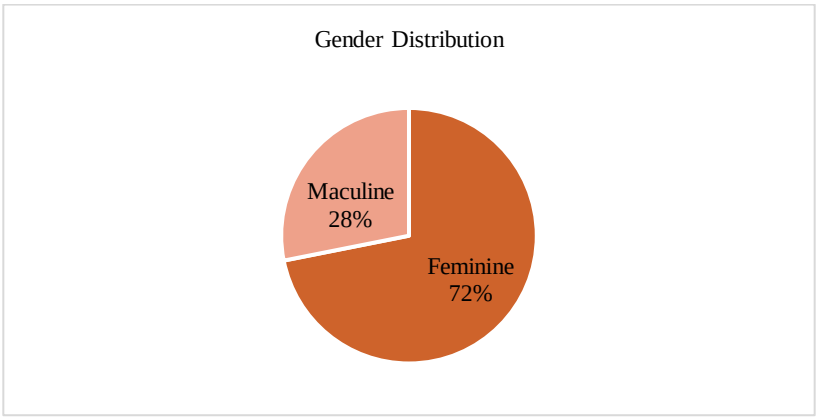
ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	AVERAGE
1. Na maioria das vezes eu sei por que tenho certos sentimentos.	4	3	5	7	7	5	4	6	6	6	6	6	6	6	6	6	5.56
2. Tenho uma boa compreensão das minhas próprias emoções.	4	4	5	6	6	3	4	6	5	6	3	6	6	6	6	6	5.13
3. Compreendo realmente o que sinto.	4	5	5	6	5	5	3	6	5	6	3	5	5	5	4	6	4.88
4. Sei sempre se estou ou não feliz.	6	5	6	7	7	5	3	3	7	7	5	7	7	6	5	5	5.69
5. Conheço sempre as emoções dos meus amigos através dos seus comportamentos.	6	5	5	5	6	6	4	3	5	6	6	5	6	6	3	5	5.13
6. Sou um bom observador das emoções dos outros.	6	4	5	7	6	5	6	6	6	6	6	7	5	7	4	6	5.75
7. Sou sensível aos sentimentos e emoções dos outros.	6	6	7	7	5	7	5	6	6	6	6	1	6	7	5	6	5.75
8. Tenho uma boa compreensão das emoções das pessoas que me rodeiam.	6	6	5	6	6	5	6	6	5	6	6	5	6	7	6	6	5.81
9. Estabeleço sempre metas para mim e tento fazer o melhor para alcançá-las.	5	5	4	6	6	4	6	5	4	5	7	4	5	4	7	6	5.19
10. Digo sempre a mim mesmo que sou competente.	4	5	4	6	3	3	5	3	4	6	6	2	3	4	7	5	4.38
11. Sou uma pessoa auto-motivadora.	3	6	4	5	4	3	7	3	4	6	5	2	3	4	7	6	4.50
12. Encoraja-me sempre a fazer o meu melhor.	5	6	4	5	6	4	7	3	5	6	5	2	3	4	7	6	4.88
13. Sou capaz de controlar o meu temperamento para gerir as dificuldades de forma racional.	6	6	6	5	3	3	6	6	5	5	6	5	3	3	5	6	4.94
14. Sou capaz de controlar as minhas próprias emoções.	4	7	6	6	6	3	6	6	5	6	6	6	4	6	4	6	5.44
15. Consigo acalmar-me facilmente quando me sinto zangado.	5	5	6	5	4	5	7	6	6	4	6	6	3	6	4	5	5.19
16. Tenho um bom controlo das minhas próprias emoções.	5	6	6	6	6	4	7	7	5	5	6	6	4	6	4	6	5.56
AVERAGE TOTAL	4.94	5.25	5.19	5.94	5.38	4.38	5.38	5.06	5.19	5.75	5.50	4.69	4.69	5.44	5.25	5.75	5.23
Self-Emotional Appraisal (SEA) Average	4.5	4.25	5.25	6.5	6.25	4.5	3.5	5.25	5.75	6.25	4.25	6	6	5.75	5.25	5.75	5.31
Other's Emotional Appraisal (OEA) Average	6	5.25	5.5	6.25	5.75	5.75	5.25	5.25	5.5	6	6	4.5	5.75	6.75	4.5	5.75	5.61
Regulation of Emotion (ROE) Average	4.25	5.5	4	5.5	4.75	3.5	6.25	3.5	4.25	5.75	5.75	2.5	3.5	4	7	5.75	4.73
Use of Emotion (UOE) Average	5	6	6	5.5	4.75	3.75	6.5	6.25	5.25	5	6	5.75	3.5	5.25	4.25	5.75	5.28

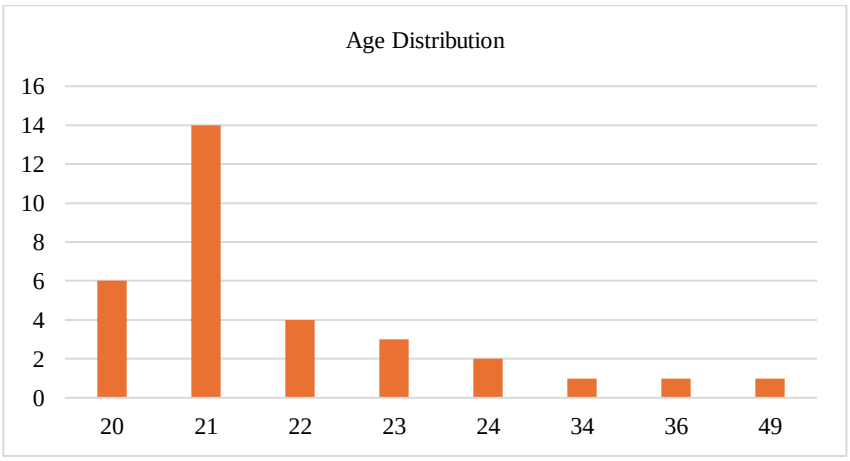
C-Lead

ID	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Consigo antecipar as ramificações políticas e interpessoais das minhas decisões e ações.	5	4	4	6	4	4	2	6	4	6	4	4	4	4	6	6
2. Consigo sintetizar para outras pessoas as principais questões envolvidas numa situação, independentemente da quantidade de dados que possuo.	5	3	4	4	5	3	3	2	4	6	6	6	4	2	6	4
3. Consigo fazer decisões e recomendações mesmo quando não tenho tanta informação quanto gostaria.	5	5	4	6	4	3	3	2	4	6	5	6	2	4	6	6
4. Consigo avaliar como é que os membros do público em geral estão a ser impactados pelas ações ou falta de ações da minha unidade em tempos de adve	6	4	4	4	6	4	4	6	4	6	5	4	4	4	6	6
5. Consigo determinar que informações são críticas para transmitir a outras unidades antes que elas as solicitem.	7	6	4	4	2	4	4	6	6	6	5	4	4	4	5	6
6. Consigo manter os outros informados sobre as minhas atividades profissionais sem os informar demasiado ou mal.	7	5	6	6	5	6	6	6	6	6	5	4	4	4	4	6
7. Consigo fazer decisões e recomendações mesmo sob extrema pressão temporal.	5	5	4	2	4	4	4	6	6	6	6	4	4	4	6	6
8. Consigo estimar as potenciais mortes e lesões que podem ocorrer como resultado das minhas decisões ou recomendações no trabalho.	5	5	6	6	6	4	4	6	6	5	4	4	6	5	4	6
9. Consigo modificar instantaneamente as minhas atividades regulares para responder a uma necessidade urgente.	7	5	4	6	7	6	6	6	2	7	6	6	6	6	6	6
AVERAGE	5.78	4.67	4.44	4.89	4.78	4.22	4.00	5.11	4.67	6.00	5.11	4.67	4.44	4.11	5.44	5.78

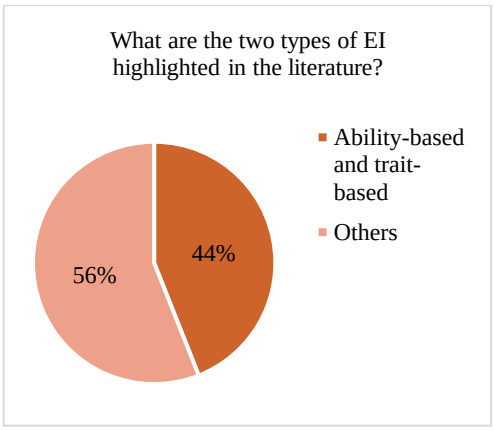
Note: The data treatment was identical for all questionnaires.

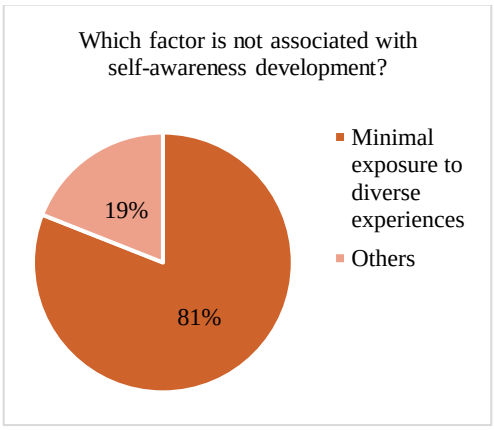
Appendix 8 *- Demographics*

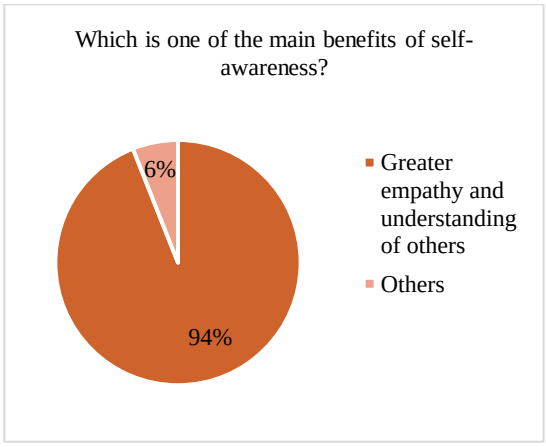




Appendix 9 *- Knowledge Questions*



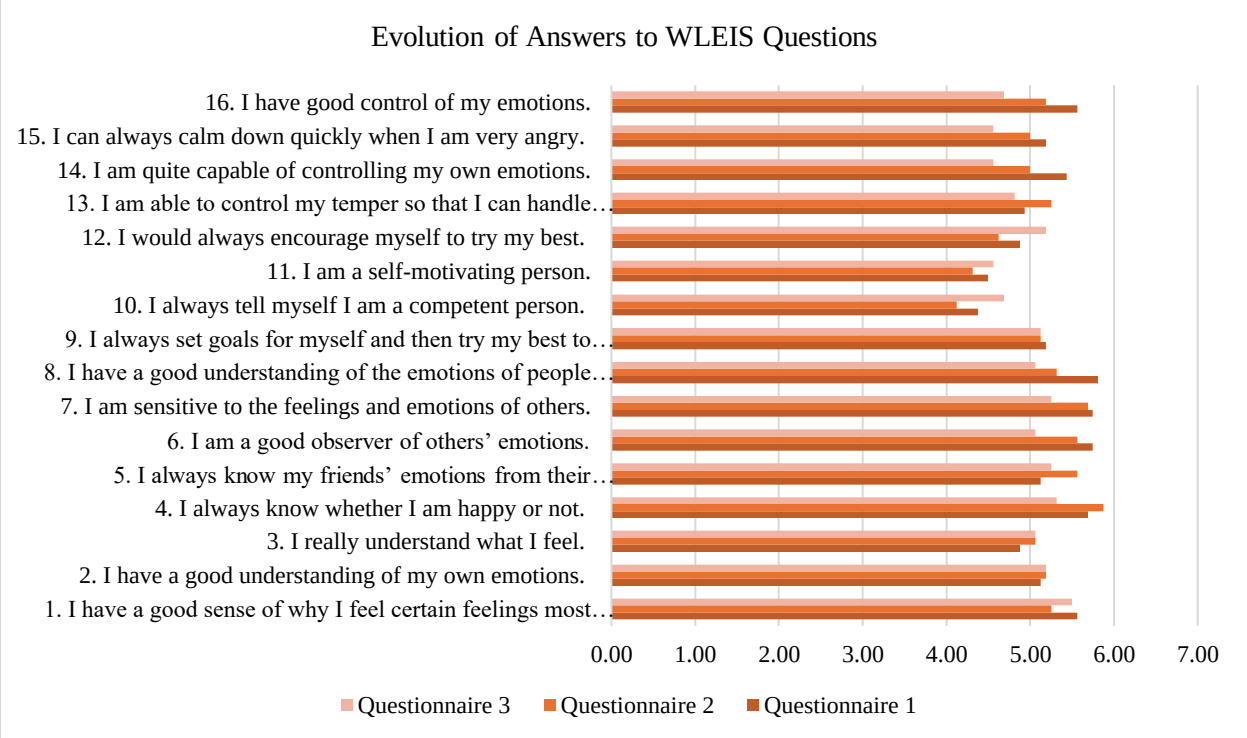




Appendix 10 *- Evolution of Answers*

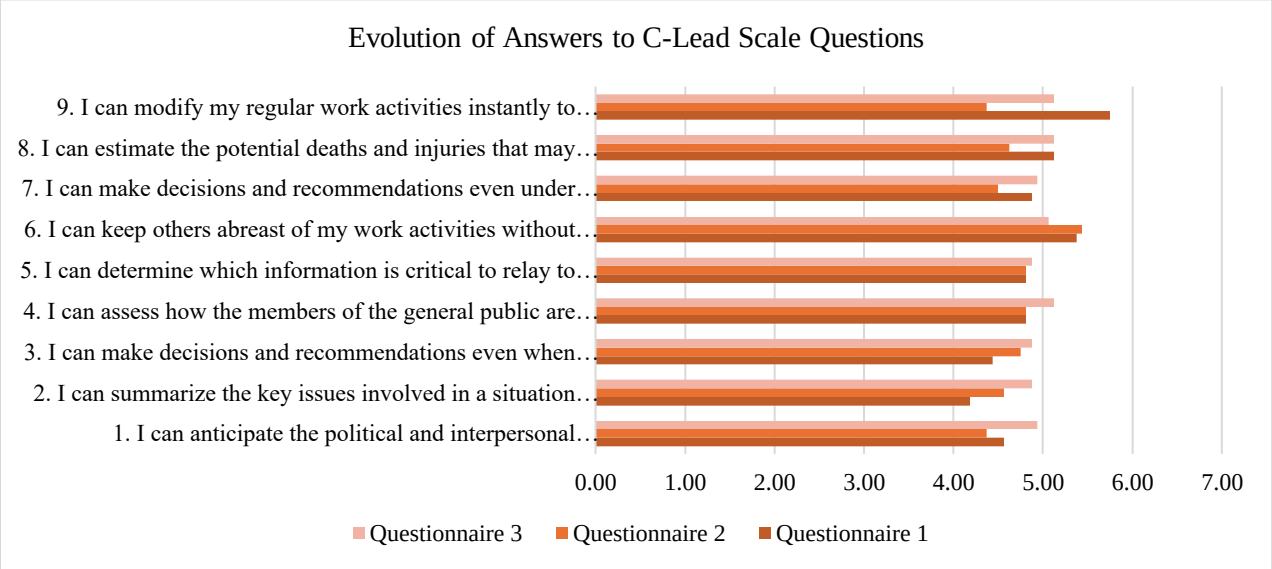
WLEIS

Question	Evolution 1-2	Evolution 2-3	Evolution 1-3
1. I have a good sense of why I feel certain feelings most of the time.	-5.62%	4.76%	-1.12%
2. I have a good understanding of my own emotions.	1.22%	0.00%	1.22%
3. I really understand what I feel.	3.85%	0.00%	3.85%
4. I always know whether I am happy or not.	3.30%	-9.57%	-6.59%
5. I always know my friends' emotions from their behaviour.	8.54%	-5.62%	2.44%
6. I am a good observer of others' emotions.	-3.26%	-8.99%	-11.96%
7. I am sensitive to the feelings and emotions of others.	-1.09%	-7.69%	-8.70%
8. I have a good understanding of the emotions of people around me.	-8.60%	-4.71%	-12.90%
9. I always set goals for myself and then try my best to achieve them.	-1.20%	0.00%	-1.20%
10. I always tell myself I am a competent person.	-5.71%	**13.64%**	7.14%
11. I am a self-motivating person.	-4.17%	5.80%	1.39%
12. I would always encourage myself to try my best.	-5.13%	12.16%	6.41%
13. I am able to control my temper so that I can handle difficulties rationally.	6.33%	-8.33%	-2.53%
14. I am quite capable of controlling my own emotions.	-8.05%	-8.75%	**-16.09%**
15. I can always calm down quickly when I am very angry.	-3.61%	-8.75%	-12.05%
16. I have good control of my emotions.	-6.74%	-9.64%	-15.73%



C-Lead

Question	Evolution 1-2	Evolution 2-3	Evolution 1-3
1. I can anticipate the political and interpersonal ramifications of my decisions and actions.	-4.11%	12.86%	8.22%
2. I can summarize the key issues involved in a situation to others regardless of how much data I have.	8.96%	6.85%	16.42%
3. I can make decisions and recommendations even when I don't have as much information as I would like.	7.04%	2.63%	9.86%
4. I can assess how the members of the general public are being impacted by my unit's actions or inactions during times of adversity.	0.00%	6.49%	6.49%
5. I can determine which information is critical to relay to other units in advance of them requesting it.	0.00%	1.30%	1.30%
6. I can keep others abreast of my work activities without over-informing or under-informing them.	1.16%	-6.90%	-5.81%
7. I can make decisions and recommendations even under extreme time pressure.	-7.69%	9.72%	1.28%
8. I can estimate the potential deaths and injuries that may occur as the result of my decisions or recommendations at work.	-9.76%	10.81%	0.00%
9. I can modify my regular work activities instantly to respond to an urgent need.	**-23.91%**	**17.14%**	-10.87%



Appendix 11 - *Normality Tests*

Explore

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
WLEIS_QUEST1	16	100.0%	0	0.0%	16	100.0%
WLEIS_QUEST2	16	100.0%	0	0.0%	16	100.0%
WLEIS_QUEST3	16	100.0%	0	0.0%	16	100.0%
CLEAD_QUEST1	16	100.0%	0	0.0%	16	100.0%
CLEAD_QUEST2	16	100.0%	0	0.0%	16	100.0%
CLEAD_QUEST3	16	100.0%	0	0.0%	16	100.0%

Descriptives

			Statistic	Std. Error
WLEIS_QUEST1	Mean		5.2363	.10466
	95% Confidence Interval for Mean	Lower Bound	5.0132	
		Upper Bound	5.4593	
	5% Trimmed Mean		5.2447	
	Median		5.2500	
	Variance		.175	
	Std. Deviation		.41865	
	Minimum		4.38	
	Maximum		5.94	
	Range		1.56	
	Interquartile Range		.51	
	Skewness		-.346	.564
	Kurtosis		-.088	1.091
WLEIS_QUEST2	Mean		5.1338	.16059
	95% Confidence Interval for Mean	Lower Bound	4.7915	
		Upper Bound	5.4760	
	5% Trimmed Mean		5.1381	
	Median		5.0300	
	Variance		.413	
	Std. Deviation		.64237	
	Minimum		4.13	
	Maximum		6.06	
	Range		1.93	
	Interquartile Range		1.04	
	Skewness		.032	.564
	Kurtosis		-1.010	1.091
WLEIS_QUEST3	Mean		4.9944	.20308
	95% Confidence Interval for Mean	Lower Bound	4.5615	
		Upper Bound	5.4272	
	5% Trimmed Mean		5.0249	
	Median		4.8800	
	Variance		.660	
	Std. Deviation		.81234	
	Minimum		3.25	
	Maximum		6.19	
	Range		2.94	
	Interquartile Range		1.26	
	Skewness		-.352	.564
	Kurtosis		-.175	1.091
CLEAD_QUEST1	Mean		4.8819	.15311
	95% Confidence Interval for Mean	Lower Bound	4.5555	
		Upper Bound	5.2082	
	5% Trimmed Mean		4.8687	
	Median		4.7250	
	Variance		.375	
	Std. Deviation		.61244	

	Minimum		4.00	
	Maximum		6.00	
	Range		2.00	
	Interquartile Range		.92	
	Skewness		.467	.564
	Kurtosis		-.734	1.091
CLEAD_QUEST2	Mean		4.6944	.20968
	95% Confidence Interval for Mean	Lower Bound	4.2475	
		Upper Bound	5.1413	
	5% Trimmed Mean		4.6976	
	Median		4.7250	
	Variance		.703	
	Std. Deviation		.83872	
	Minimum		3.22	
	Maximum		6.11	
	Range		2.89	
	Interquartile Range		1.30	
	Skewness		-.079	.564
	Kurtosis		-.794	1.091
CLEAD_QUEST3	Mean		4.9919	.30723
	95% Confidence Interval for Mean	Lower Bound	4.3370	
		Upper Bound	5.6467	
	5% Trimmed Mean		5.1271	
	Median		5.1650	
	Variance		1.510	
	Std. Deviation		1.22892	
	Minimum		1.22	
	Maximum		6.33	
	Range		5.11	
	Interquartile Range		1.42	
	Skewness		-1.962	.564
	Kurtosis		5.572	1.091

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
WLEIS_QUEST1	.144	16	.200*	.972	16	.869
WLEIS_QUEST2	.108	16	.200*	.943	16	.382
WLEIS_QUEST3	.122	16	.200*	.958	16	.619
CLEAD_QUEST1	.135	16	.200*	.944	16	.395
CLEAD_QUEST2	.080	16	.200*	.981	16	.972
CLEAD_QUEST3	.170	16	.200*	.824	16	.006

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
SEA1	16	100.0%	0	0.0%	16	100.0%
OEA1	16	100.0%	0	0.0%	16	100.0%
ROE1	16	100.0%	0	0.0%	16	100.0%
UOE1	16	100.0%	0	0.0%	16	100.0%
SEA2	16	100.0%	0	0.0%	16	100.0%
OEA2	16	100.0%	0	0.0%	16	100.0%
ROE2	16	100.0%	0	0.0%	16	100.0%
UEO2	16	100.0%	0	0.0%	16	100.0%
SEA3	16	100.0%	0	0.0%	16	100.0%
OEA3	16	100.0%	0	0.0%	16	100.0%
ROE3	16	100.0%	0	0.0%	16	100.0%
UOE3	16	100.0%	0	0.0%	16	100.0%

Descriptives

			Statistic	Std. Error
SEA1	Mean		5.3125	.21949
	95% Confidence Interval for Mean	Lower Bound	4.8447	
		Upper Bound	5.7803	
	5% Trimmed Mean		5.3472	
	Median		5.5000	
	Variance		.771	
	Std. Deviation		.87797	
	Minimum		3.50	
	Maximum		6.50	
	Range		3.00	
	Interquartile Range		1.50	
	Skewness		-.586	.564
	Kurtosis		-.640	1.091
OEA1	Mean		5.6094	.14607
	95% Confidence Interval for Mean	Lower Bound	5.2980	
		Upper Bound	5.9207	
	5% Trimmed Mean		5.6076	
	Median		5.7500	
	Variance		.341	
	Std. Deviation		.58430	
	Minimum		4.50	
	Maximum		6.75	
	Range		2.25	
	Interquartile Range		.75	
	Skewness		-.357	.564
	Kurtosis		.576	1.091
ROE1	Mean		4.7344	.30828
	95% Confidence Interval for Mean	Lower Bound	4.0773	
		Upper Bound	5.3915	
	5% Trimmed Mean		4.7326	
	Median		4.5000	
	Variance		1.521	
	Std. Deviation		1.23312	
	Minimum		2.50	
	Maximum		7.00	
	Range		4.50	
	Interquartile Range		2.13	
	Skewness		.054	.564
	Kurtosis		-.775	1.091

UOE1	Mean		5.2813	.21875
	95% Confidence Interval for Mean	Lower Bound	4.8150	
		Upper Bound	5.7475	
	5% Trimmed Mean		5.3125	
	Median		5.3750	
	Variance		.766	
	Std. Deviation		.87500	
	Minimum		3.50	
	Maximum		6.50	
	Range		3.00	
	Interquartile Range		1.19	
	Skewness		-.737	.564
	Kurtosis		-.178	1.091
SEA2	Mean		5.3438	.15117
	95% Confidence Interval for Mean	Lower Bound	5.0215	
		Upper Bound	5.6660	
	5% Trimmed Mean		5.3542	
	Median		5.2500	
	Variance		.366	
	Std. Deviation		.60467	
	Minimum		4.25	
	Maximum		6.25	
	Range		2.00	
	Interquartile Range		.75	
	Skewness		-.084	.564
	Kurtosis		-.905	1.091
OEA2	Mean		5.5313	.16906
	95% Confidence Interval for Mean	Lower Bound	5.1709	
		Upper Bound	5.8916	
	5% Trimmed Mean		5.5069	
	Median		5.5000	
	Variance		.457	
	Std. Deviation		.67623	
	Minimum		4.50	
	Maximum		7.00	
	Range		2.50	
	Interquartile Range		1.00	
	Skewness		.496	.564
	Kurtosis		-.025	1.091
ROE2	Mean		4.5469	.27407
	95% Confidence Interval for Mean	Lower Bound	3.9627	
		Upper Bound	5.1310	
	5% Trimmed Mean		4.5521	
	Median		4.7500	
	Variance		1.202	
	Std. Deviation		1.09628	
	Minimum		3.00	
	Maximum		6.00	
	Range		3.00	
	Interquartile Range		2.19	
	Skewness		-.160	.564
	Kurtosis		-1.506	1.091
UEO2	Mean		5.1250	.24044
	95% Confidence Interval for Mean	Lower Bound	4.6125	
		Upper Bound	5.6375	
	5% Trimmed Mean		5.1667	
	Median		5.3750	
	Variance		.925	
	Std. Deviation		.96177	
	Minimum		3.25	
	Maximum		6.25	
	Range		3.00	
	Interquartile Range		1.69	

	Skewness		-.735	.564
	Kurtosis		-.688	1.091
SEA3	Mean		5.2656	.19826
	95% Confidence Interval for Mean	Lower Bound	4.8430	
		Upper Bound	5.6882	
	5% Trimmed Mean		5.2396	
	Median		5.2500	
	Variance		.629	
	Std. Deviation		.79304	
	Minimum		4.00	
	Maximum		7.00	
	Range		3.00	
	Interquartile Range		1.13	
	Skewness		.207	.564
	Kurtosis		.229	1.091
OEA3	Mean		5.1563	.26504
	95% Confidence Interval for Mean	Lower Bound	4.5913	
		Upper Bound	5.7212	
	5% Trimmed Mean		5.1736	
	Median		5.3750	
	Variance		1.124	
	Std. Deviation		1.06017	
	Minimum		3.00	
	Maximum		7.00	
	Range		4.00	
	Interquartile Range		1.50	
	Skewness		-.439	.564
	Kurtosis		-.213	1.091
ROE3	Mean		4.8906	.24470
	95% Confidence Interval for Mean	Lower Bound	4.3691	
		Upper Bound	5.4122	
	5% Trimmed Mean		4.9340	
	Median		5.1250	
	Variance		.958	
	Std. Deviation		.97881	
	Minimum		3.00	
	Maximum		6.00	
	Range		3.00	
	Interquartile Range		1.81	
	Skewness		-.500	.564
	Kurtosis		-.936	1.091
UOE3	Mean		4.6563	.31364
	95% Confidence Interval for Mean	Lower Bound	3.9877	
		Upper Bound	5.3248	
	5% Trimmed Mean		4.6736	
	Median		5.0000	
	Variance		1.574	
	Std. Deviation		1.25457	
	Minimum		3.00	
	Maximum		6.00	
	Range		3.00	
	Interquartile Range		2.75	
	Skewness		-.268	.564
	Kurtosis		-1.775	1.091

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
SEA1	.191	16	.122	.928	16	.230
OEA1	.158	16	.200*	.942	16	.378
ROE1	.170	16	.200*	.957	16	.605
UOE1	.141	16	.200*	.935	16	.297
SEA2	.187	16	.139	.945	16	.410
OEA2	.119	16	.200*	.966	16	.763
ROE2	.176	16	.198	.892	16	.060
UEO2	.180	16	.177	.895	16	.068
SEA3	.119	16	.200*	.960	16	.658
OEA3	.212	16	.052	.939	16	.339
ROE3	.169	16	.200*	.912	16	.126
UOE3	.187	16	.138	.828	16	.007

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Appendix 12 *- Friedman Tests*

WLEIS

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
WLEIS_QUEST1	16	5.2363	.41865	4.38	5.94
WLEIS_QUEST2	16	5.1338	.64237	4.13	6.06
WLEIS_QUEST3	16	4.9944	.81234	3.25	6.19

Friedman Test

Ranks

	Mean Rank
WLEIS_QUEST1	2.16
WLEIS_QUEST2	1.97
WLEIS_QUEST3	1.88

Test Statistics[a]

N	16
Chi-Square	.677
df	2
Asymp. Sig.	.713

a. Friedman Test

WLEIS COMPONENTS

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
SEA1	16	5.3125	.87797	3.50	6.50
SEA2	16	5.3438	.60467	4.25	6.25
SEA3	16	5.2656	.79304	4.00	7.00

Friedman Test

Ranks

	Mean Rank
SEA1	2.03
SEA2	2.13
SEA3	1.84

Test Statistics[a]

N	16
Chi-Square	.764
df	2
Asymp. Sig.	.683

a. Friedman Test

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
OEA1	16	5.6094	.58430	4.50	6.75
OEA2	16	5.5312	.67623	4.50	7.00
OEA3	16	5.1563	1.06017	3.00	7.00

Friedman Test

Ranks

	Mean Rank
OEA1	2.13
OEA2	2.03
OEA3	1.84

Test Statistics[a]

N	16
Chi-Square	.778
df	2
Asymp. Sig.	.678

a. Friedman Test

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
ROE1	16	4.7344	1.23312	2.50	7.00
ROE2	16	4.5469	1.09628	3.00	6.00
ROE3	16	4.8906	.97881	3.00	6.00

Friedman Test

Ranks

	Mean Rank
ROE1	2.06
ROE2	1.63
ROE3	2.31

Test Statistics[a]

N	16
Chi-Square	4.203
df	2
Asymp. Sig.	.122

a. Friedman Test

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
UOE1	16	5.2813	.87500	3.50	6.50
UOE2	16	5.1250	.96177	3.25	6.25
UOE3	16	4.6563	1.25457	3.00	6.00

Friedman Test

Ranks

	Mean Rank
UOE1	2.25
UOE2	2.06
UOE3	1.69

Test Statistics[a]

N	16
Chi-Square	3.000
df	2
Asymp. Sig.	.223

a. Friedman Test

WLEIS Q10

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
WLEIS_QUEST2Q10	16	4.1250	1.20416	2.00	6.00
WLEIS_QUEST3Q10	16	4.6875	1.07819	3.00	6.00

Friedman Test

Ranks

	Mean Rank
WLEIS_QUEST2Q10	1.34
WLEIS_QUEST3Q10	1.66

Test Statistics[a]

N	16
Chi-Square	2.778
df	1
Asymp. Sig.	.096

a. Friedman Test

NPar Tests

[DataSet1] /Users/filipapaulino/Desktop/SPSS/Questions with biggest change.sav

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
WLEIS_QUEST1Q10	16	4.3750	1.40831	2.00	7.00
WLEIS_QUEST3Q10	16	4.6875	1.07819	3.00	6.00
WLEIS_QUEST2Q10	16	4.1250	1.20416	2.00	6.00

Friedman Test

Ranks

	Mean Rank
WLEIS_QUEST1Q10	2.09
WLEIS_QUEST3Q10	2.19
WLEIS_QUEST2Q10	1.72

Test Statistics[a]

N	16
Chi-Square	3.405
df	2
Asymp. Sig.	.182

a. Friedman Test

WLEIS Q14

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
WLEIS_QUEST1Q14	16	5.4375	1.09354	3.00	7.00
WLEIS_QUEST2Q14	16	5.0000	1.03280	3.00	6.00
WLEIS_QUEST3Q14	16	4.5625	1.26326	3.00	6.00

Friedman Test

Ranks

	Mean Rank
WLEIS_QUEST1Q14	2.41
WLEIS_QUEST2Q14	1.94
WLEIS_QUEST3Q14	1.66

Test Statistics[a]

N	16
Chi-Square	6.837
df	2
Asymp. Sig.	.033

a. Friedman Test

C-LEAD Q9

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
CLEAD_QUEST1Q9	16	5.7500	1.23828	2.00	7.00
CLEAD_QUEST2Q9	16	4.3750	1.50000	2.00	7.00
CLEAD_QUEST3Q9	16	5.1250	1.31022	1.00	7.00

Friedman Test

Ranks

	Mean Rank
CLEAD_QUEST1Q9	2.53
CLEAD_QUEST2Q9	1.44
CLEAD_QUEST3Q9	2.03

Test Statistics[a]

N	16
Chi-Square	13.064
df	2
Asymp. Sig.	.001

a. Friedman Test