Summary

- The **Engagement Average Rate per month** from July to October basically **remained the same** across the months
- The **Engament Average Rate** from July to October was **8.74**
- The 3 **lowest Engagement Indicators** (average) were *Wellness, Recognition and Happiness*
- From the three Engagement Indicators with the lowest scores we have *Stress, Recognition Frequency and Work-Life Balance as* the **Engagement Sub-Indicators with the lowest scores**
- **78, 47, 25** e **46** are the **groups with the lowest** Engagement Average Rate (< 8.0)

Findings & Recommendations

	Findings	Recommendations
	• For Wellness the lowest sub-indicator is Stress (average 7,9). • For Recognition the lowest sub-indicator is Recognition Frequency (average 8,2). • For Happiness the lowest sub-indicator is Work-Life Balance (average 8,5).	• Create a Wellbeing Program(if it does not exist): meditation, mindfullness, yoga or daily exercises can help employees handle stress. [1] • Get more data to check the average promotion frequency and review or create a Recognition Program. [2] • Prioritizing the wellbeing and health can help to improve the Work-Life Balance. [3]
	• 4 groups have an Engagement Average Rate below 8,0. • They are the groups 78, 47, 25 and 46.	• Work together with HR Business Partners and the Leader of these groups to analyse deeper the indicators and sub-indicators and set action plans to improve the Engagement Average Rate.
	• After the data cleaning (N/A removing) some groups had no responses or a low number of responses. • They are the groups: 17, 67, 76, 77, 79, 80, 81, 82, 83, 84	• Check if these groups have none or a low number of employees.
	• Compensation has the lowest sub-indicator average. • Stress is the second lowest sub-indicator average.	• Participate/Contract a compensation survey to check if our salaries are competitive in the market. • Analyse the turnover and engagement scores to create a Machine Learning algorithm that helps to predict the chances of leaving. [4]

1 - https://www.shrm.org/resourcesandtools/hr-topics/employee-relations/pages/how-managers-can-help-stressed-workers-.aspx
2 - https://www.aihr.com/blog/employee-recognition-program/#Reco
3 - https://www.forbes.com/sites/nataliapeart/2020/11/06/the-most-important-ways-companies-can-improve-work-life-balance/?sh=30f9d20b79a9
4 - https://www.aihr.com/blog/high-turnover-meaning-rates/

Engagement Rate

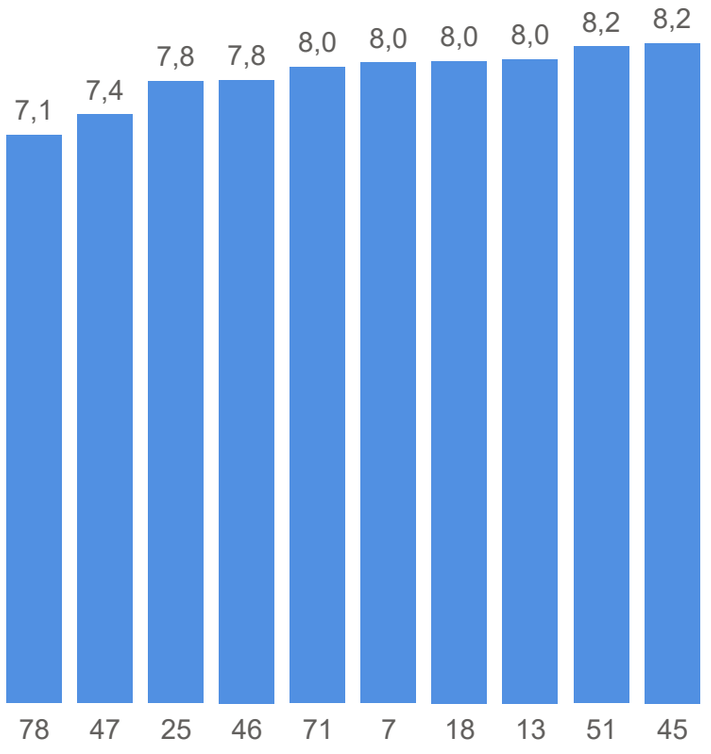
There was **no big changes** in the Engagement Average Rate during the months.

Below we can see the **10 groups** with the **lowest** Engagement Average Rate.

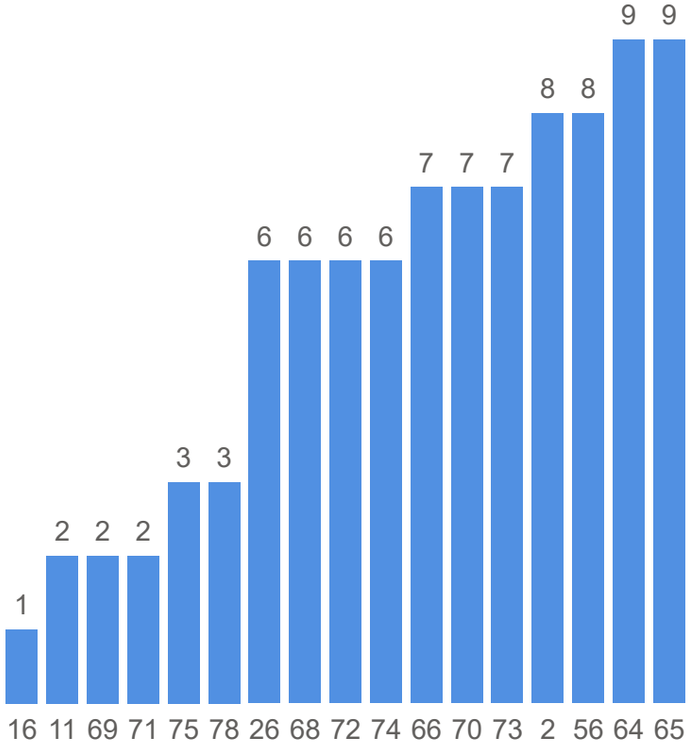
17 groups have **less than 10 responses,** including 2 with the lowest Engament Average Rate (78 and 71).

Engagement by Month (Average)

Engagement by Group (Average)



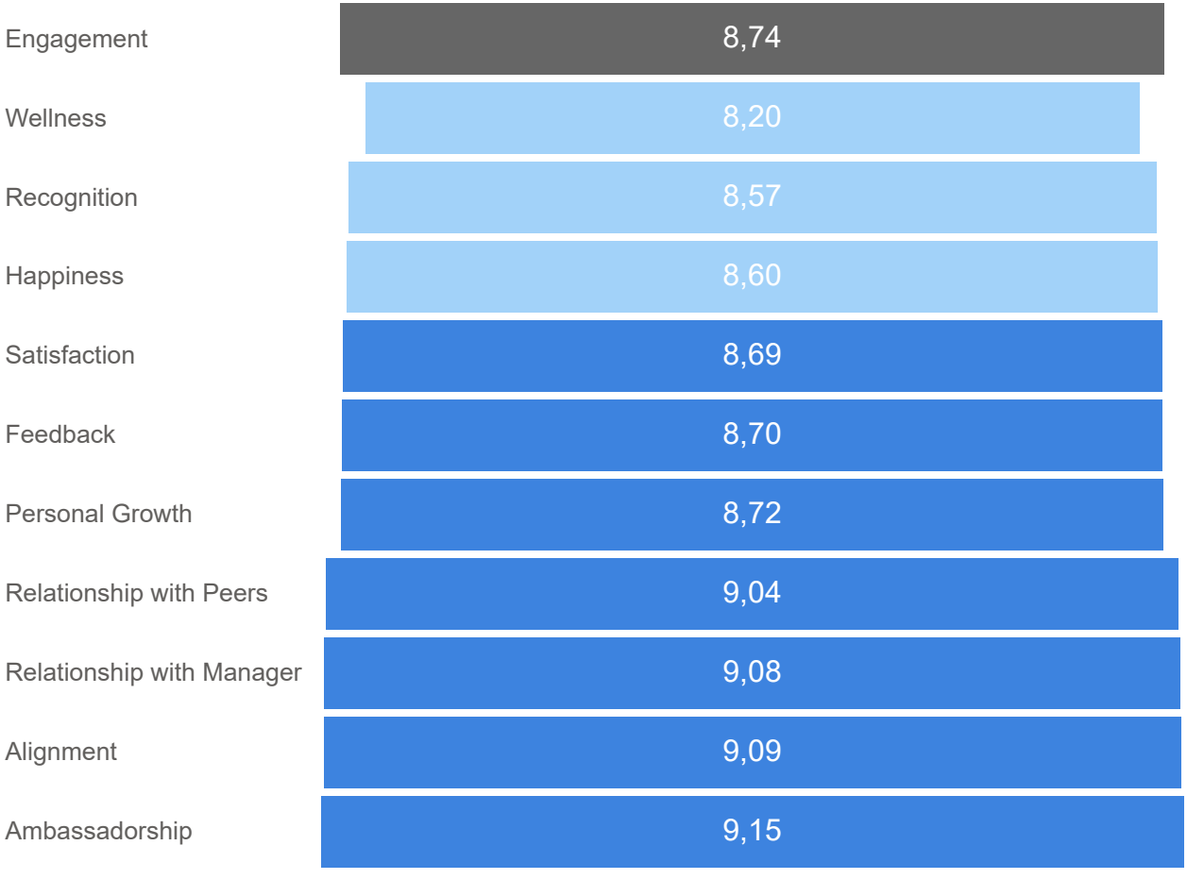
Responses per Group (<10)



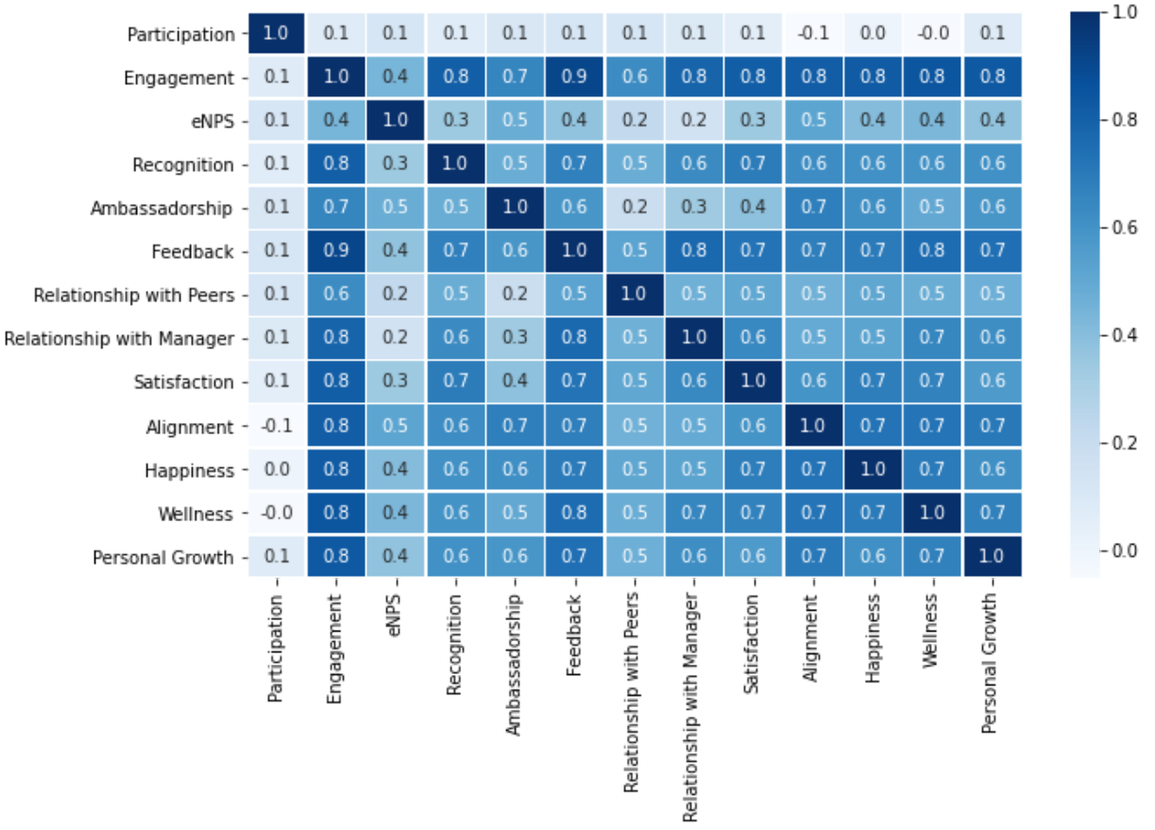
Engagement Indicators Average and Correlation Matrix

The three **Engagement Indicators** with the **lowest scores** are: *Wellness, Recognition and Happiness* and they have a high correlation with the Engagement Score.

Engagement Indicators



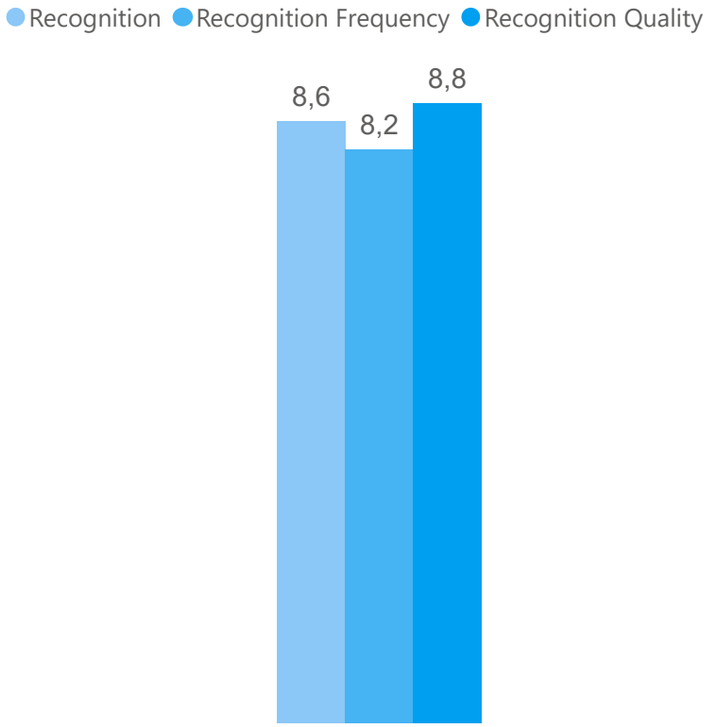
Correlation Matrix



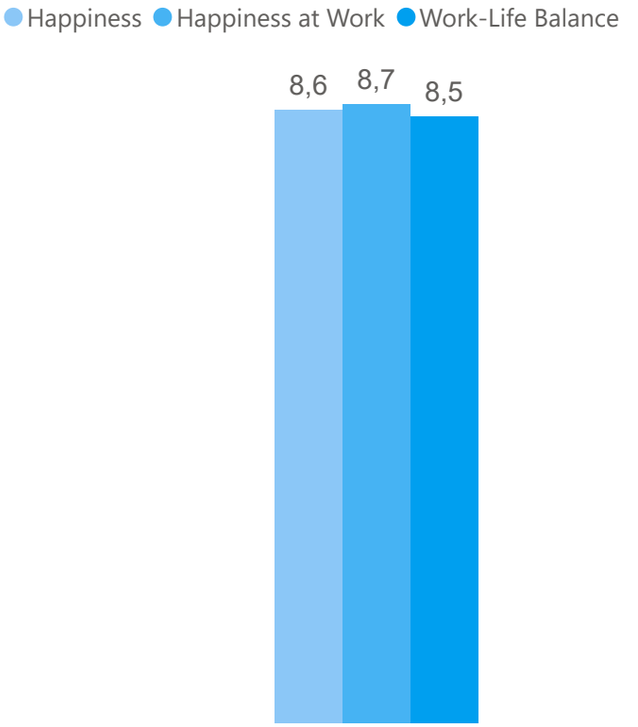
Engagement Indicators with Lowest Scores and Sub-Indicators

From the three Engagement Indicators with the lowest scores we have *Stress, Recognition Frequency and Work-Life Balance as* the **Engagement Sub-Indicators** with the **lowest scores.**

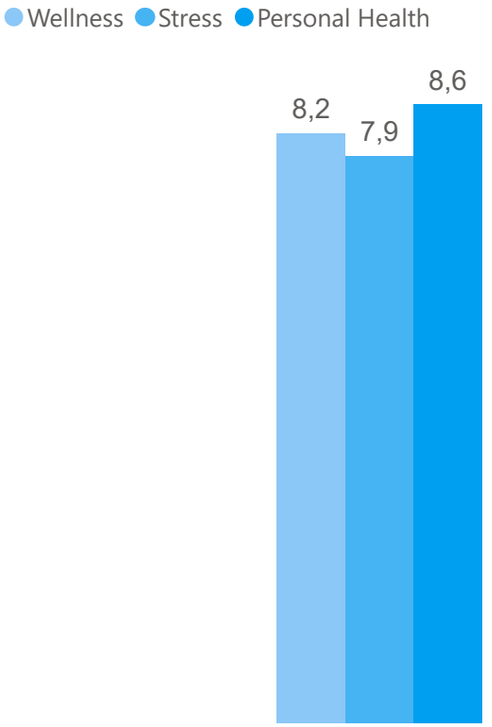
Recognition



Happiness

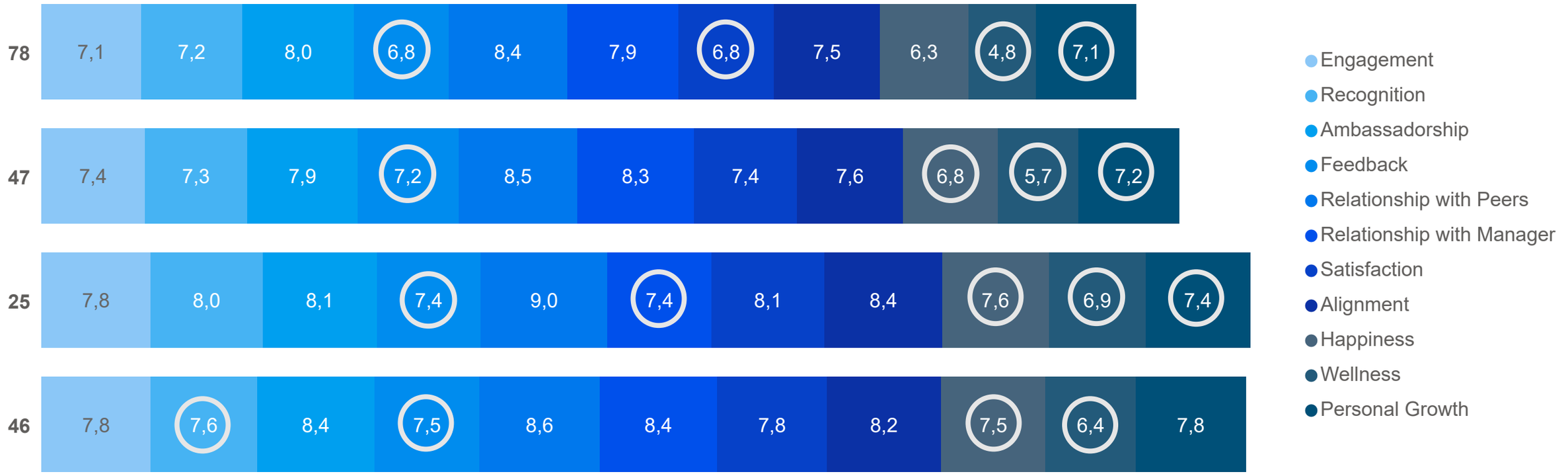


Wellness



Engagement Indicators for the Groups with Lowest Engagement Average Rate

Below we can see in detail the **lowest Engagement Indicators** for each one of the **4 groups** with the **lowest** Engagement Average Rate.



Information

- Python language was used with Jupyter Notebook to clean and analyse the data, and plot the correlation matrix
- All the N/A rows were deleted from the dataframe because they represent a small percentage of the total rows (>1%)
- The data was also cleaned and analysed using Excel
- This pbix file is using a google sheet as data source (the xlsx file was uploaded to the google sheet)