



TECHNISCHE HOCHSCHULE  
OSTWESTFALEN-LIPPE  
UNIVERSITY OF  
APPLIED SCIENCES  
AND ARTS

# Role of Positive Feedback in Employee Well-Being Working With an Intelligent Assistant in Manufacturing Sector

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# Overview

- Introduction
- Hypothesis
- Methodology
- Discussion
- Questions

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# What is well-being?



Combination of physical, mental, emotional and social health factors



Meaningful positive outcome

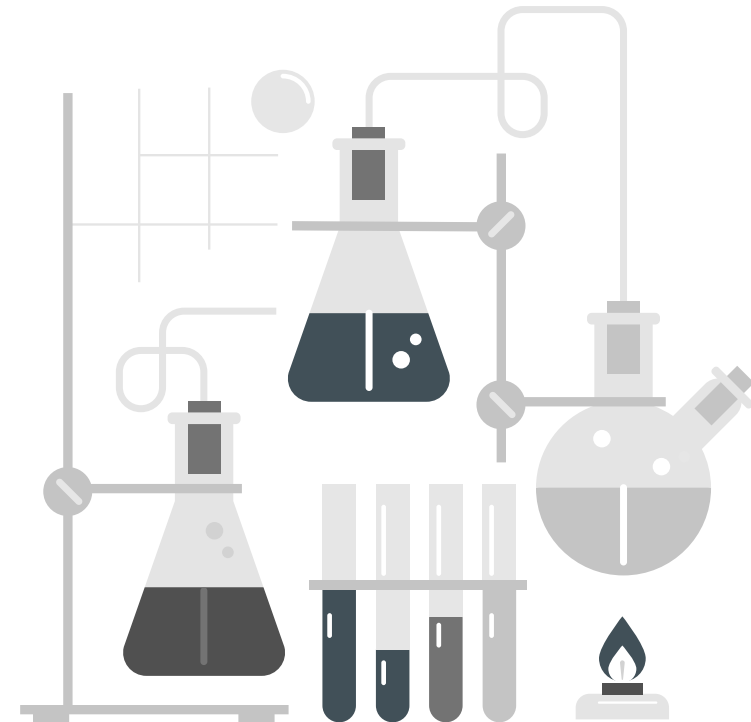


Achieved through practising healthy habits



# Related Studies

- Focused on Education, Finance etc. Domains
- Supervisor or Manager's point of view
- Well-being is related to Feedback
- Feedback characteristics are not discussed



# Focus of the study

- Manufacturing sector
- Working with an intelligent assistant
- Relation between Affect & Authentic Pride (Well-being) and Positive Task Feedback (Valence)



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# Hypothesis



"The Positive task feedback would be associated with an increase in well-being"



# Overview

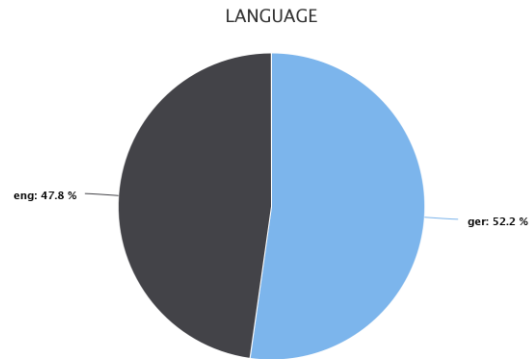
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# Online Survey

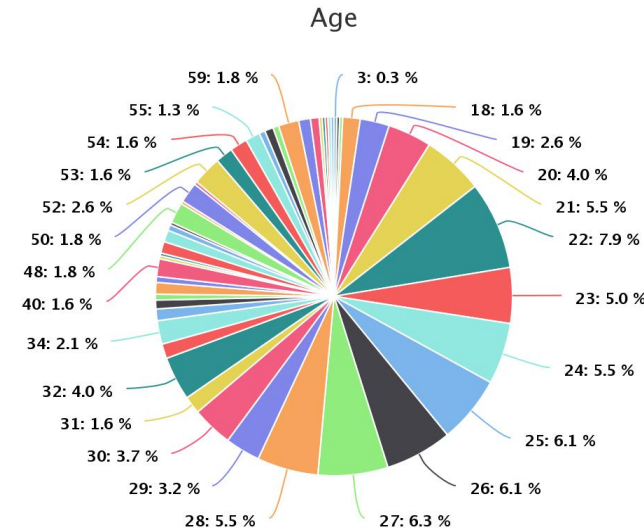
- Three questionnaire set
- One for significance two for Feedback
- 40%-40%-20% distribution
- Response recorded on Likert Scale (1 to 7)



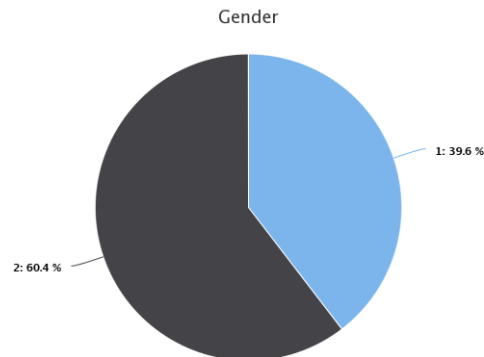
# Data Analysis



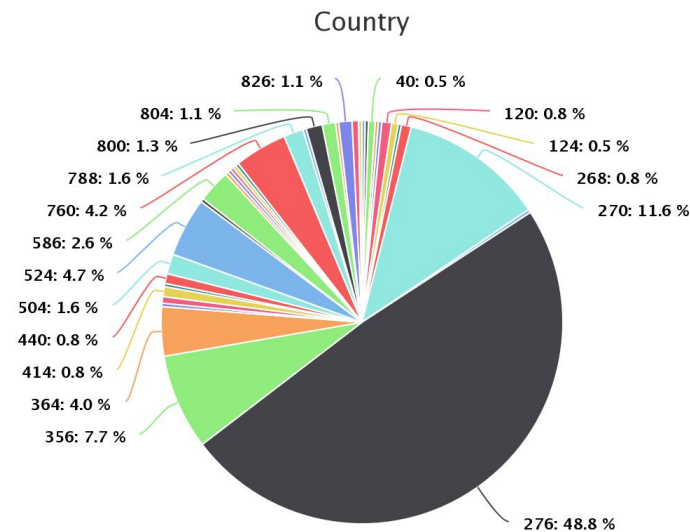
German – 52%  
English – 48%



Between 18 to 40 years



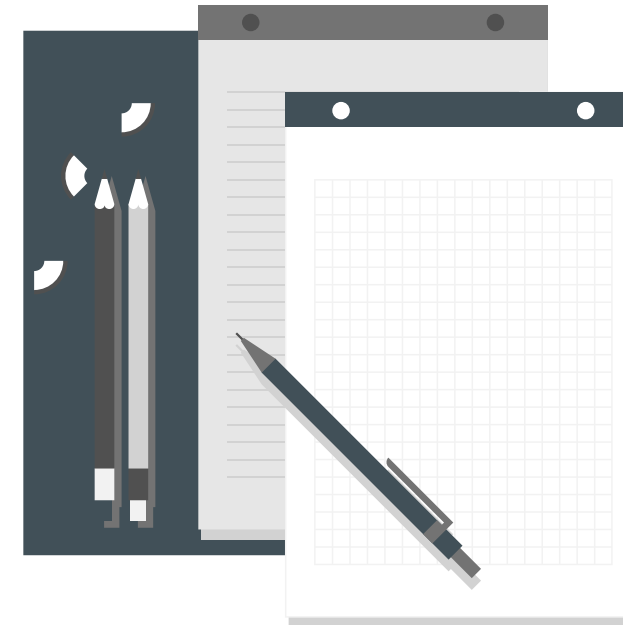
Male – 60%  
Female – 40%



Germany – 49%  
Gambia – 12%  
India – 8%

# Data Preparation

- Concentration on a questionnaire set-1 data set
- Remove the control group from the valence
- Average of variables Satisfied, Successful, Confident (positive affect)



# Data Reliability

- The Unidimensional Reliability Test
- Cronbach's  $\alpha$  lies between 70% to 95%



# Comparing well-being and positive feedback

- Why independent sample T-Test?
  - Two independent groups
  - Scaled in intervals (1-7)
  - Normally distributed
- Independent variable – Valence  
(Positive Task Feedback)
- Dependent variable – Well-being  
(Affect & Authentic Pride)

Group Descriptives ▼

	Group	N	Mean	SD	SE	Coefficient of variation
Well-being	1	82	5.008	1.468	0.162	0.293
	2	82	4.435	1.753	0.194	0.395

Independent Samples T-Test ▼

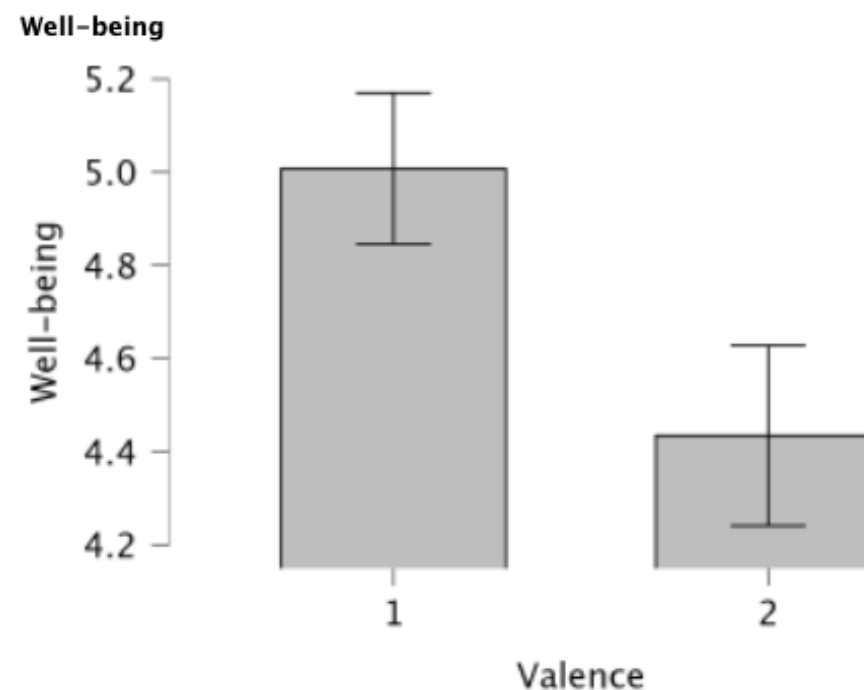
	Test	Statistic	df	p	Mean Difference	SE Difference
Well-being	Student	2.271	162.000	0.024	0.573	0.252
	Welch	2.271	157.147	0.025	0.573	0.252

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# Discussion

- Reliable data, Cronbach's  $\alpha$  lies between 70% to 95%
- P-value is less than 0.05 (5%)
- The alternative hypothesis is accepted
- Well-being (Affect & Authentic Pride) increases as positive feedback (Valence) grow





# Summary

- Introduction
  - What is well-being?
  - Related Work
  - Study Focus
- Hypothesis
- Methodology
  - Online Survey
  - Data Analysis
  - Data Preparation
  - Data Reliability
  - Why Independent Sample T-Test?
- Discussion

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# Questions





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Thank you!