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International Conference Riga

Publication

Measuring Team Performance under the determinants of behavior a result of a Pre-Test Survey

Doctoral Student / Supervisors / Publications



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Publications:

Giesa, Andreas Michael, **Laboratory Case Study on Behavior Change: Is it possible to train behavior and trigger a sustainable change?**, Current Issues in Management of Business and Society Development, Riga, Latvia, May 5th-7th, 2011

Giesa, Andreas Michael, **Team Performance & Behavior Economics linked to a brief laboratory Pre-Test of measured behavior influence as a determine of Team Performance**, International Conference, Academy of Business Administration, London, UK, August 3rd-7th, 2011

Giesa, Andreas Michael, **Measuring Team Performance under the determinants of behavior – a result of a Pre-Test Survey**, International Conference, Current Issues in Economic and Management Sciences, Riga, Latvia, Nov 10th-12th, 2011

Measuring Team Performance under the determinants of behavior - a result of a Pre-Test Survey



Introduction

Cluster Behavior

Hypotheses

Cluster Behavior

Pre-Test Survey

Results

Conclusion

- ➔ Behavioral Economics enters more and more into business organizations and Team Performance develops to a key driver.
- ➔ Behavior becomes more important due to the crisis and trigger changes through organizations that like to become also measured.
- ➔ Teams are central for a success. Researchers in this field are: Hyatt, Ruffy, Furnham, Moran, Cummings, Bromiley, Balderson, Jones

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Introduction

Cluster Behavior

Hypotheses

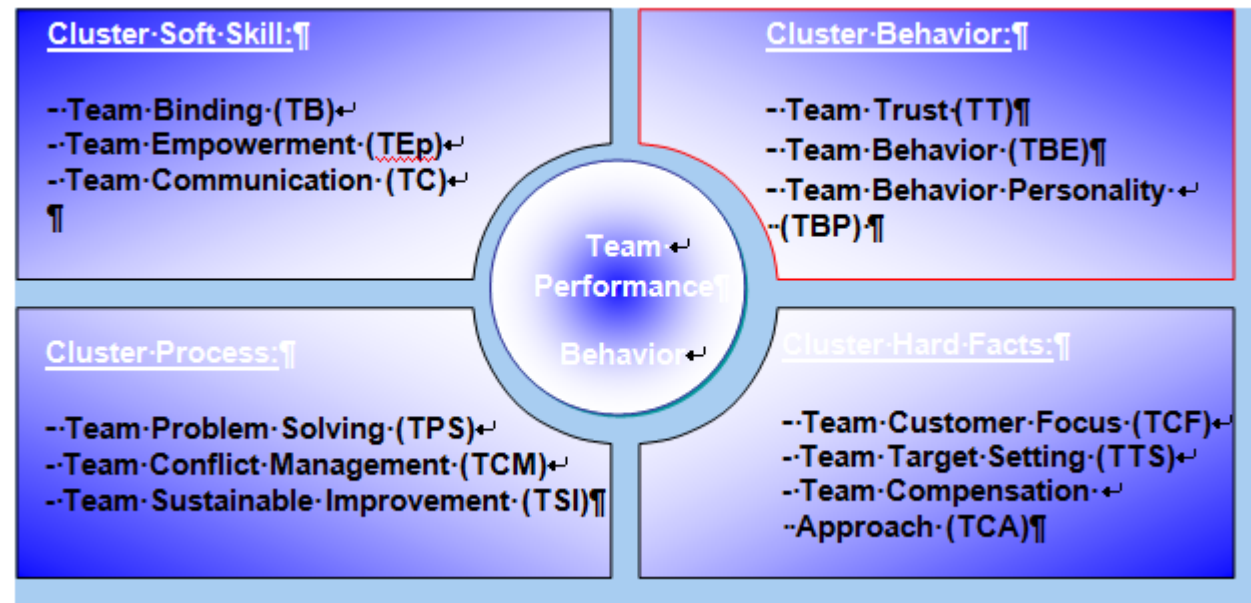
Cluster Behavior

Pre-Test Survey

Results

Conclusion

- **Team Trust** = Degree to which team members believe they can depend on each other (abilities and intentions)
- **Team Behavior** = on the origin of psycho-hysological, extro-intro, values, diversity
- **Team Behavior Personality** = personality aspects of experience (age, education)



Measuring Team Performance under the determinants of behavior - a result of a Pre-Test Survey



Introduction

Cluster Behavior

Hypotheses

Cluster Behavior

Pre-Test Survey

Results

Conclusion

Cluster Behavior: Dimension Team Trust

H_{y1TT} *The higher the heterogeneity, the higher the Team Performance will be.*

Cluster Behavior: Dimension Team Behavior Personality

H_{y1TBP} *The higher the age range in the team, the higher Team Performance will be.*

H_{y2TBP} *The higher the level of education in the team, the higher Team Performance will be.*

Cluster Behavior: Dimension Team Behavior

H_{y1TB} *The higher diversity index in a team, the higher the Team Performance will be.*

H_{y2TB} *The higher the amount of not taken vacation days, the higher the Team Performance will be.*

Measuring Team Performance under the determinants of behavior - a result of a Pre-Test Survey



Introduction

Cluster Behavior

Hypotheses

Cluster Behavior

Pre-Test Survey

Results

Conclusion

Cluster Team Trust:

- Team members trust each other.
- Team members with different nationalities add value to the team performance.
- Team members with different experiences (e.g. experiences living abroad) lead to a greater trustfulness within the team
- Team members with different experiences (e.g. experiences living abroad) lead to a better performance.
- Teams with different cultural backgrounds are more communicative with each other.

Cluster Behavior in Teams:

- Team members know who in the team behaves more introverted.
- Team members know who in the team behaves more extroverted.
- Team members care less about vacation days, but are more interested in increasing the team performance.
- Team members know the value each team member adds to the team and they appreciate each other's strength.
- Team members know how a team member will act/react in specific situations.
- Teams with mixed-gender (women and men) lead to better results.

Cluster: Team Behavior Personality:

- Team members have an understanding of their colleagues colleague's.
- Teams with a wider age range lead to a better performance because overall they are more experienced.
- Team members know who in the team has a more chaotic and imaginative working style.
- Team members are open to share experiences and colleagues appreciate this.
- Team members know who has a more softhearted and helpful personality.
- Teams with a high educational level lead to higher performance results.

General Question to the Cluster Behavior

- Team Performance increases by knowing more about the behavior of the others.

Measuring Team Performance under the determinants of behavior - a result of a Pre-Test Survey



Introduction

Cluster Behavior

Hypotheses

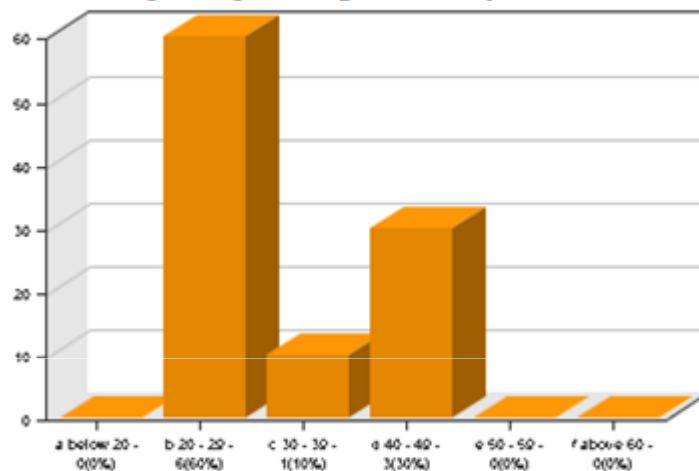
Cluster Behavior

Pre-Test Survey

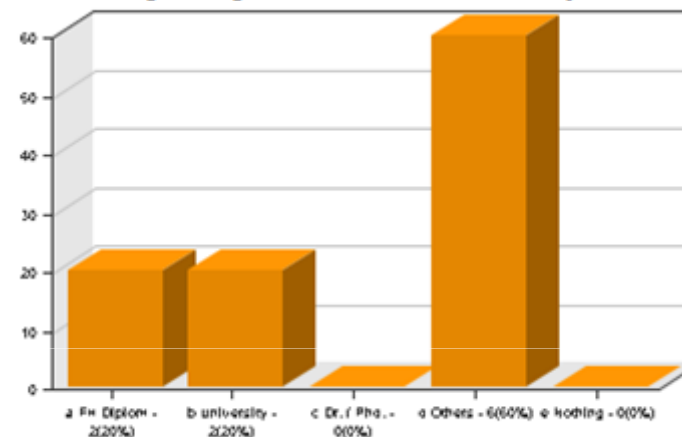
Results

Conclusion

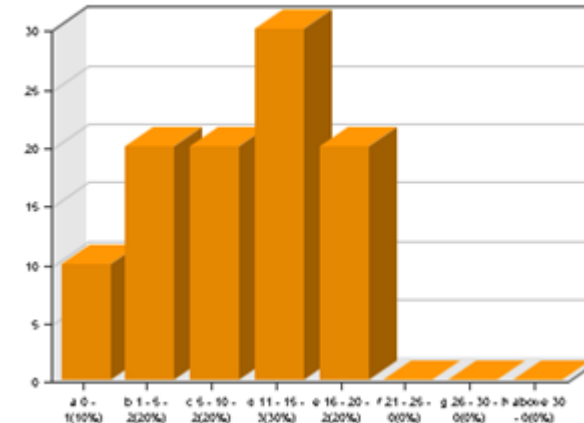
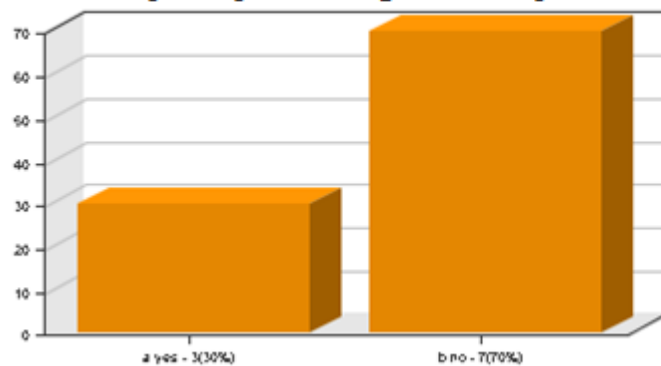
Allocation of participant's age of Survey Pre-Test



Allocation of participant's education of Survey Pre-Test



Allocation of participant's living abroad experience of Survey Allocation of participant's open vacation status



Measuring Team Performance under the determinants of behavior - a result of a Pre-Test Survey



Introduction

Cluster Behavior

Hypotheses

Cluster Behavior

Pre-Test Survey

Results

Conclusion

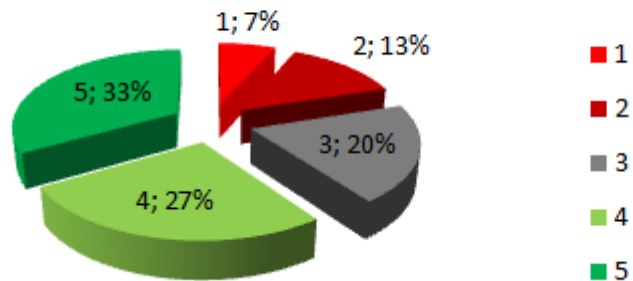
H_{yITT} Evaluation of Team members with different nationalities adds value to the team's performance.

In the following the allocation of the evaluation is shown including the key figures. One key result is that in total 50% evaluates that TM with different nationalities add value to TP, even though in this population only 30% have living experience abroad.

Key figures are:

N = 10 Arithmetic Mean = 3.3 Variance = 2.21 Median = 4 Min = 1
Range = 4 Standard Deviation = 1.4 Mode = 5 Max = 5

Figure 7: Allocation ...to nationalities adds value to TP of Survey Pre-Test



Measuring Team Performance under the determinants of behavior - a result of a Pre-Test Survey



Introduction

Cluster Behavior

Hypotheses

Cluster Behavior

Pre-Test Survey

Results

Conclusion

H_{YITT} Team members with different experiences (e.g. experiences living abroad) lead to a greater trustfulness within the team. Team members with different experiences (e.g. experiences living abroad) lead to a better performance.

Key figures are:

Experiences versus trustfulness

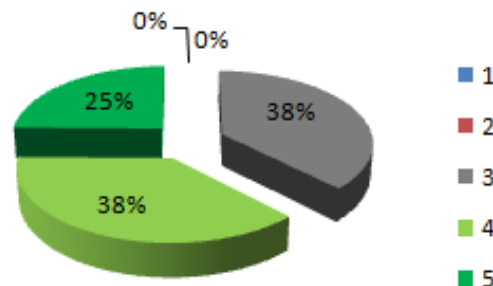
N = 10 Arithmetic Mean = 3.875 Variance = 0.61 Median = 4 Min = 3
 Range = 2 Standard Deviation = 0.78 Mode = 3 Max = 5

Experiences versus better performance

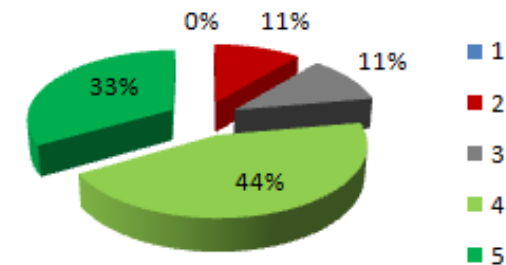
N = 10 Arithmetic Mean = 4 Variance = 0.89 Median = 4 Min = 2
 Range = 3 Standard Deviation = 0.94 Mode = 4 Max = 5

Figure 8: Allocation of ...experiences... by Survey Pre-Test

experiences vs. trustfulness



experiences vs. Better performance



Measuring Team Performance under the determinants of behavior - a result of a Pre-Test Survey



Introduction

Cluster Behavior

Hypotheses

Cluster Behavior

Pre-Test Survey

Results

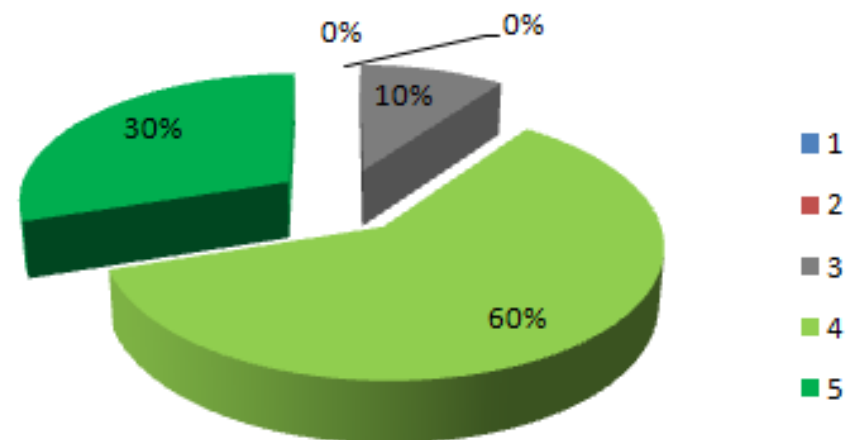
Conclusion

H_{1/1B} Teams with mixed-gender (women and men) lead to better results.

Key figures are:

N = 10 Arithmetic Mean = 4.2 Variance = 0.36 Median = 4 Min = 3
Range = 2 Standard Deviation = 0.6 Mode = 4 Max = 5

Allocation of ...mixed-gender... by Survey Pre-Test



Measuring Team Performance under the determinants of behavior - a result of a Pre-Test Survey



Introduction

Cluster Behavior

Hypotheses

Cluster Behavior

Pre-Test Survey

Results

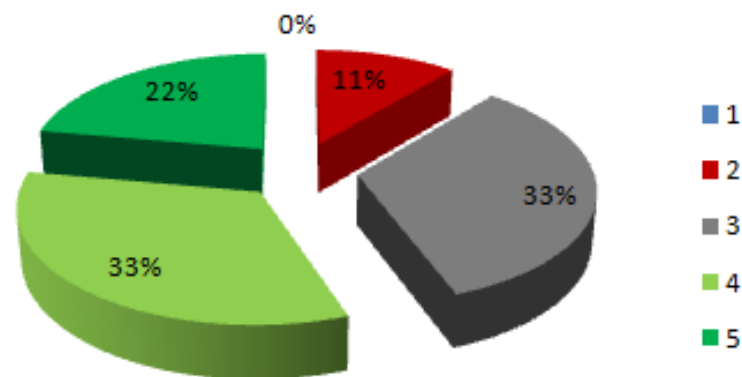
Conclusion

H_{y2TB} Team members care less about vacation days, but are more interested in increasing the team performance.

Key figures are:

N = 10 Arithmetic Mean = 3.66 Variance = 0.89 Median = 4 Min = 2
Range = 3 Standard Deviation = 0.94 Mode = 3 Max = 5

Allocation of ...open vacation days... by Survey Pre-Test



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Introduction

Cluster Behavior

Hypotheses

Cluster Behavior

Pre-Test Survey

Results

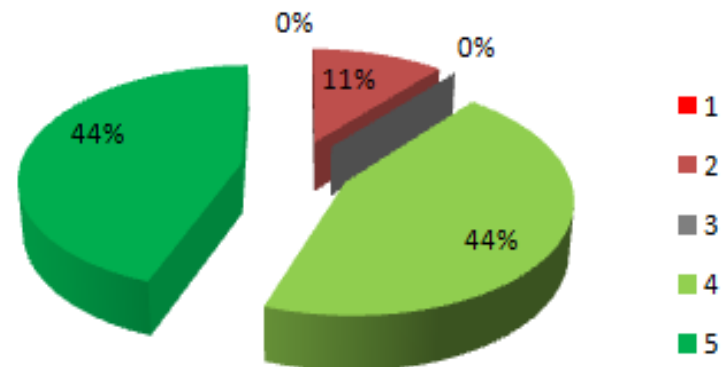
Conclusion

H_{y1TBP} Teams with a wider age range lead to a better performance because overall they are more experienced.

Key figures are:

N = 10 Arithmetic Mean = 4.2 Variance = 0.84 Median = 4 Min = 2
Range = 3 Standard Deviation = 0.92 Mode = 4 Max = 5

Figure 11: Allocation of ...age-range... by Survey Pre-Test



Measuring Team Performance under the determinants of behavior - a result of a Pre-Test Survey



Introduction

Cluster Behavior

Hypotheses

Cluster Behavior

Pre-Test Survey

Results

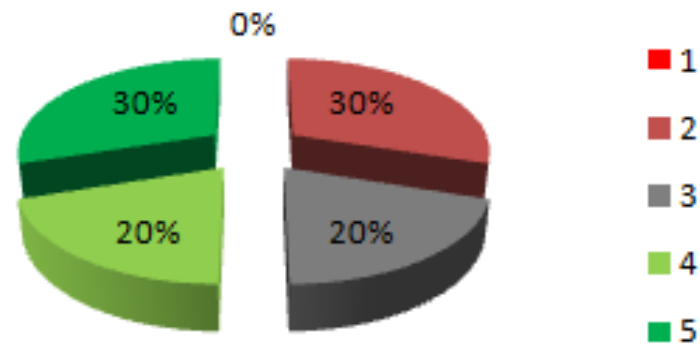
Conclusion

H_{y2TBP} Teams with a high educational level lead to higher performance results.

Key figures are:

N = 10 Arithmetic Mean = 3.5 Variance = 1.45 Median = 3.5 Min = 2
Range = 3 Standard Deviation = 1.20 Mode = 2 Max = 5

Allocation of ...educational level... by Survey Pre-Test



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Introduction

Cluster Behavior

Hypotheses

Cluster Behavior

Pre-Test Survey

Results

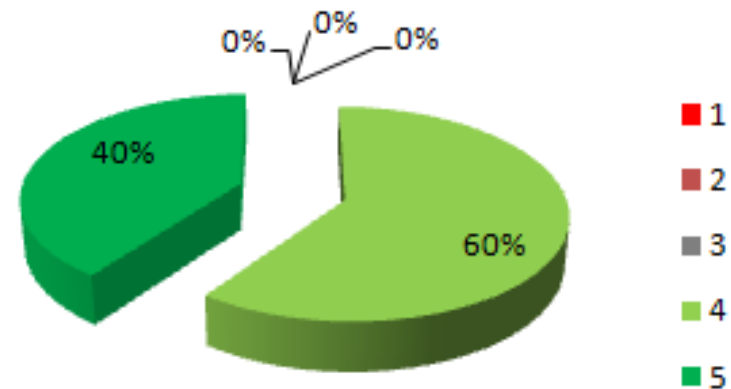
Conclusion

H₀ Team Performances increases by knowing more about the behavior of the others.

Key figures are:

N = 10 Arithmetic Mean = 4.4 Variance = 0.24 Median = 4 Min = 4
Range = 1 Standard Deviation = 0.49 Mode = 4 Max = 5

Allocation of ...behavior... by Survey Pre-Test



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Introduction

Cluster Behavior

Hypotheses


Cluster Behavior

Pre-Test Survey


Results

Conclusion


A. Cluster Behavior: Dimension Team Trust

 *H_{y1TT}*: The higher the heterogeneity, the higher the TP will be. The questions of team members with different nationalities add value to the TP and TM with different experiences lead to a better trustfulness and Team Performance link to this hypothesis. Based in the results in the Pre-Test, it can be concluded that all three questions deliver a positive trend to this hypothesis and should be therefore continued to be evaluated in the final survey, too.

B. Cluster Behavior: Dimension Behavior Personality

 *H_{y1TBP}*: The higher the age range in the team, the higher Team Performance will be; and *H_{y2TBP}* the higher the level of education in the team, the higher Team Performance will be. The questions of age range and educational level in the survey of the cluster behavior links so to these hypotheses. The results in the Pre-Test for the age range were clearly positive and delivered already a strong positive trend. The educational level question and so the hypothesis is not clear and more representative data is needed. In conclusion, both hypotheses with these questions should be more evaluated in the next step of the survey.

C. Cluster Behavior: Dimension Team Behavior

 *H_{y1TB}*: The higher diversity index in a team, the higher Team Performance will be; and *H_{y2TB}* the higher the amount of not taken vacation days, the higher Team Performance will be. The questions of the mixed-gender and the open vacation days are directly linked to these hypotheses. The evaluation of the mix-gender in the Pre-Test delivers a strong positive trend, whereby the trend of the hypothesis with the open vacation status cannot be stated as a trend. However, the data is not clear and therefore this hypothesis as well as the other will be continued and tested in the final Team Performance survey.



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