



What drives our project teams?

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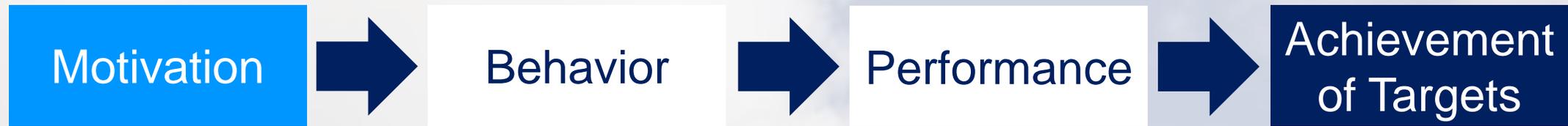
Background



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- Motivation is complex.
- Motivation research is underrepresented in construction.



Self-determination theory developed by Deci & Ryan



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- SDT defines motivation based on the three psychological needs:
 - ➔ Autonomy
 - ➔ Competence
 - ➔ Relatedness
- *“Human beings are active, growth-oriented organisms who are naturally inclined toward integration of their psychic elements into a unified sense of self and integration of themselves into larger social structures”* (Deci and Ryan 2000, p. 229).



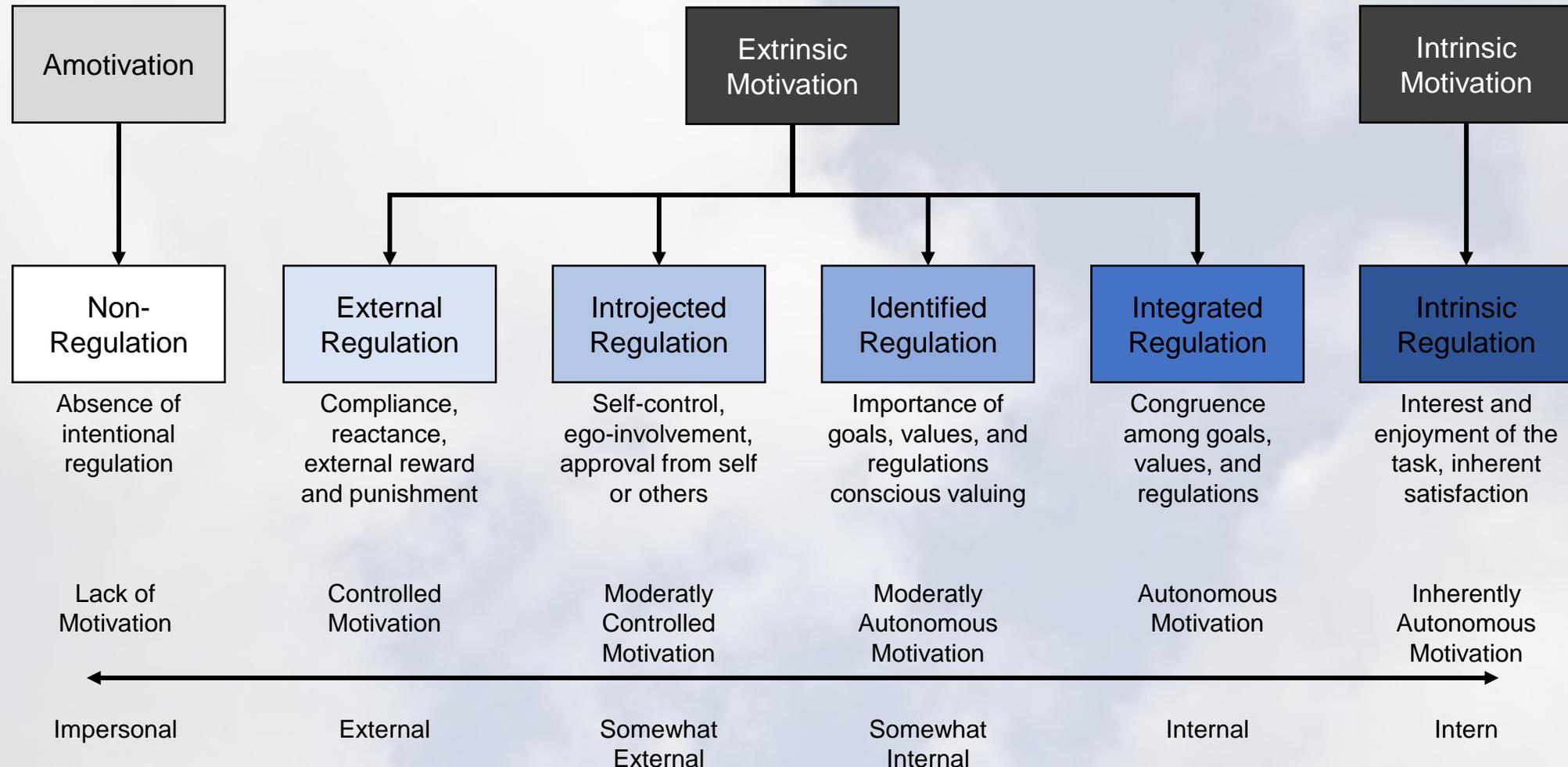
Self-determination theory (Ryan and Deci 2000)



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Research question & method



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- What drives project team members in the construction industry?

Case study 2019

21 interviews of one project team in January 2019
(Schöttle & Nesensohn 2019)



Production system must be based on the product request and the project team's needs.

Case study 2020

- Survey regarding work motivation was sent to the same group in January 2020, now working in different projects.
- Survey response 90 %.



Content of the survey



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- Work-related Basic Need Satisfaction scale (**W-BNS**) to measure work-related need satisfaction (Broeck et al. 2010).
- Work Extrinsic and Intrinsic Motivation Scale (**WEIMS**) to measure work motivation based on self-determination theory (Tremblay et al. 2009).
- Multidimensional Work Motivation Scale (**MWMS**) to measure “work motivation at the domain level of analysis” (Gagné et al. 2015, S. 179).
- **Additional questions** regarding the current project situation and personal data.



Reference vs. current project



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#	LPS implementation in the current project?	How do you feel about your current project?	How do you feel about the project BMW Freimann?
1	No	Tough	Together
2	Yes	Interesting	Respect, good time
3	Yes	Involved	Involved
4	No	New Tasks	Concern about Revit
5	Yes	Disaster	Great teamwork, fun and stressful
6	No	Satisfaction	Great
7	No	Chaotic	Structure
8	Yes	Anger	Proud and Happy
9	No	Chaotic	Satisfaction
10	No	Well planned	Teamwork
11	Yes	Proud	Pleasure
12	Yes	Motivated	Successful
13	No	Good team spirit	Again please
14	Yes	Mixed feelings	Super
15	No	Assistant	Satisfaction
16	Only design phase	Well...	Proud
17	-	-	Solution-oriented, great team members
18	-	-	Satisfaction

- Reference project is very positively anchored in the respondents' minds.
- 50% of the respondents named negative feelings and moods regarding their current project.
- LPS implementation alone is not sufficient to achieve satisfaction.



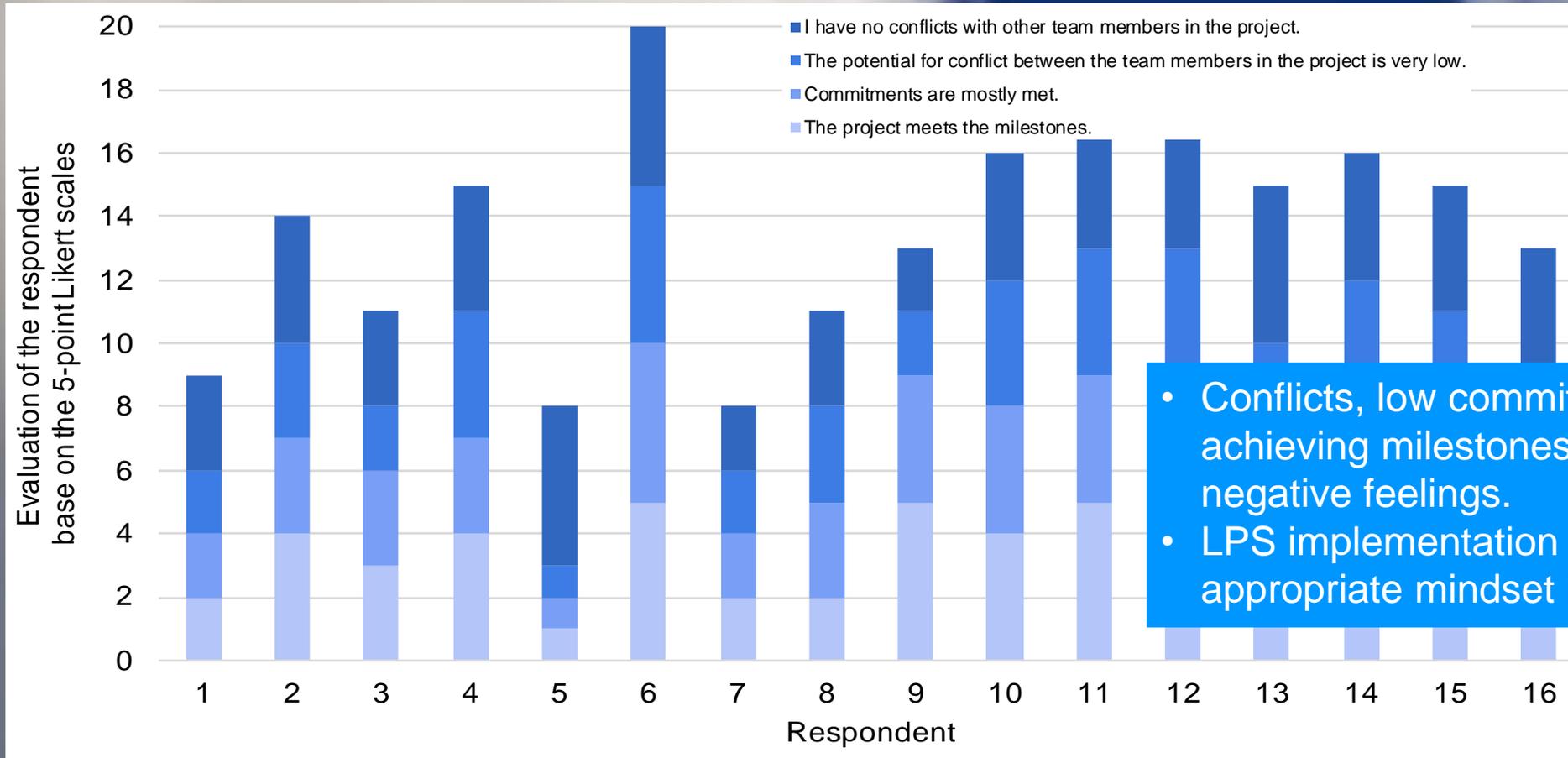
Reference vs. current project



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- Conflicts, low commitments, not achieving milestones generate negative feelings.
- LPS implementation without the appropriate mindset is not working.

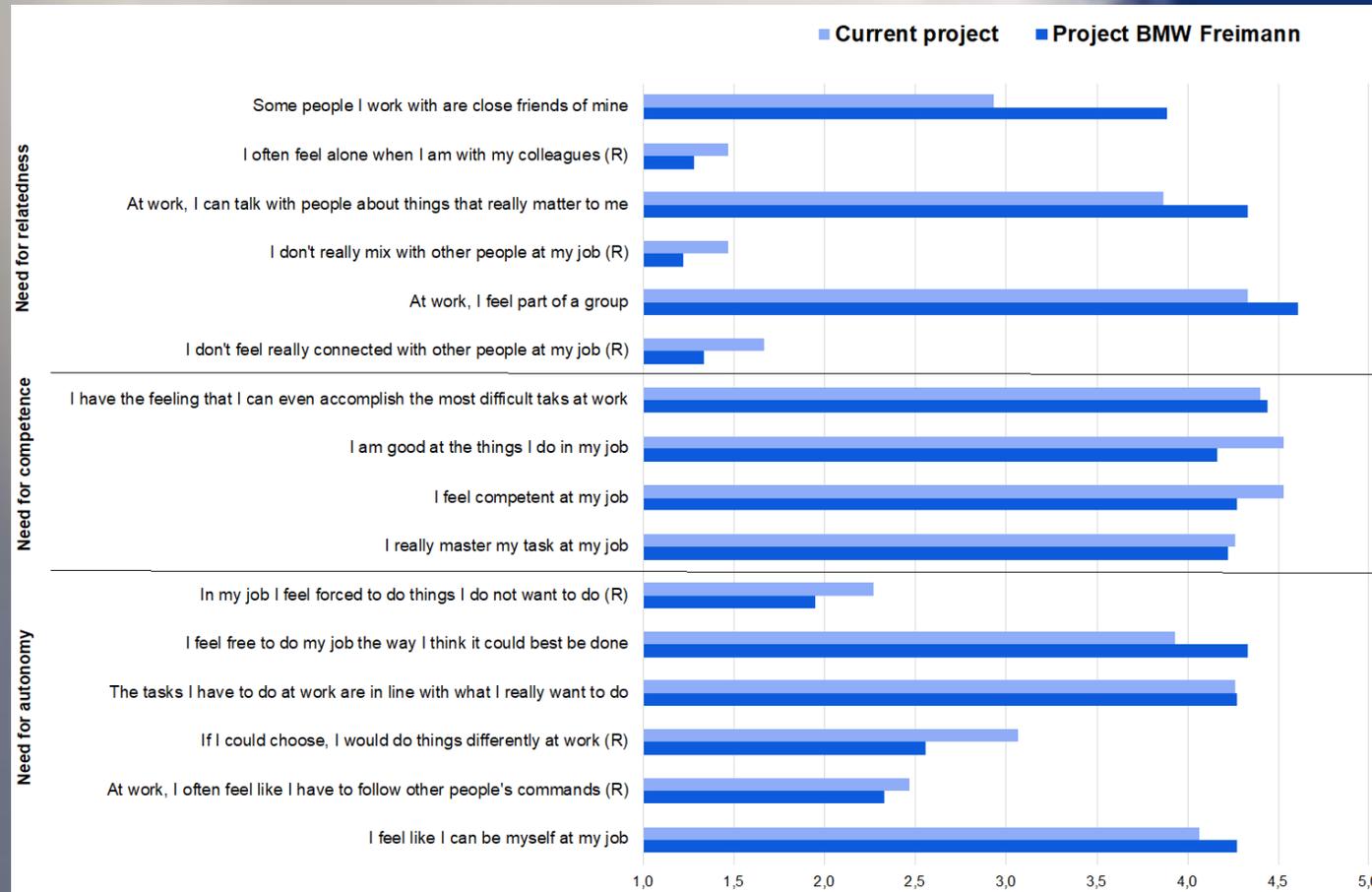
W-BNS scale



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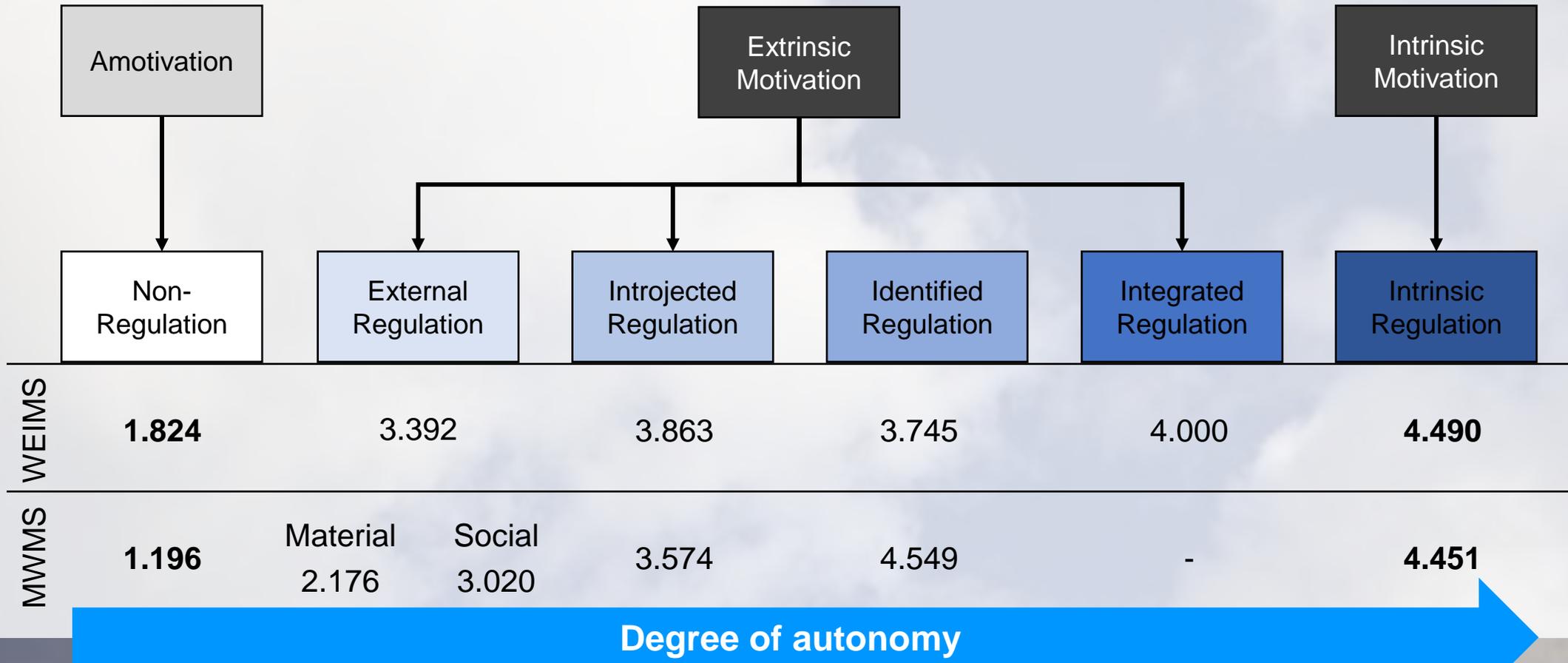
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- Respondents feel autonomy in both projects.
- No big difference regarding the need for competence.
- Need for relatedness is more fulfilled in the reference project.



Overall mean of WEIMS and MWMS scale



Conclusion



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- The data indicates that the satisfaction of psychological needs drives the individual's motivation.
- Organizations must focus on balancing and fulfilling those psychological needs.
- Project setting, and the relationships among the team members are very important.



Limitations

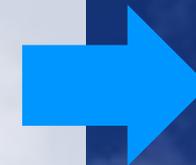


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1. Idealization of the reference project, because of the time difference.
2. Data relies on self-report.
3. Personal preferences and differences in need satisfaction are not considered.
4. Different impacts of each psychological need are not considered.
5. Minor evaluation bias through impression management.
6. Small sample size that was not randomly chosen.
7. Cultural background needs to be consider.
8. No differentiation made between the design and construction team.



More research
is needed to
represent the
construction
industry.



Thank you!

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