

Investigation on Construction Workers' Norms and Project Managers' Norms Regarding Absence Behavior: Preliminary Results from a Norm Elicitation Study

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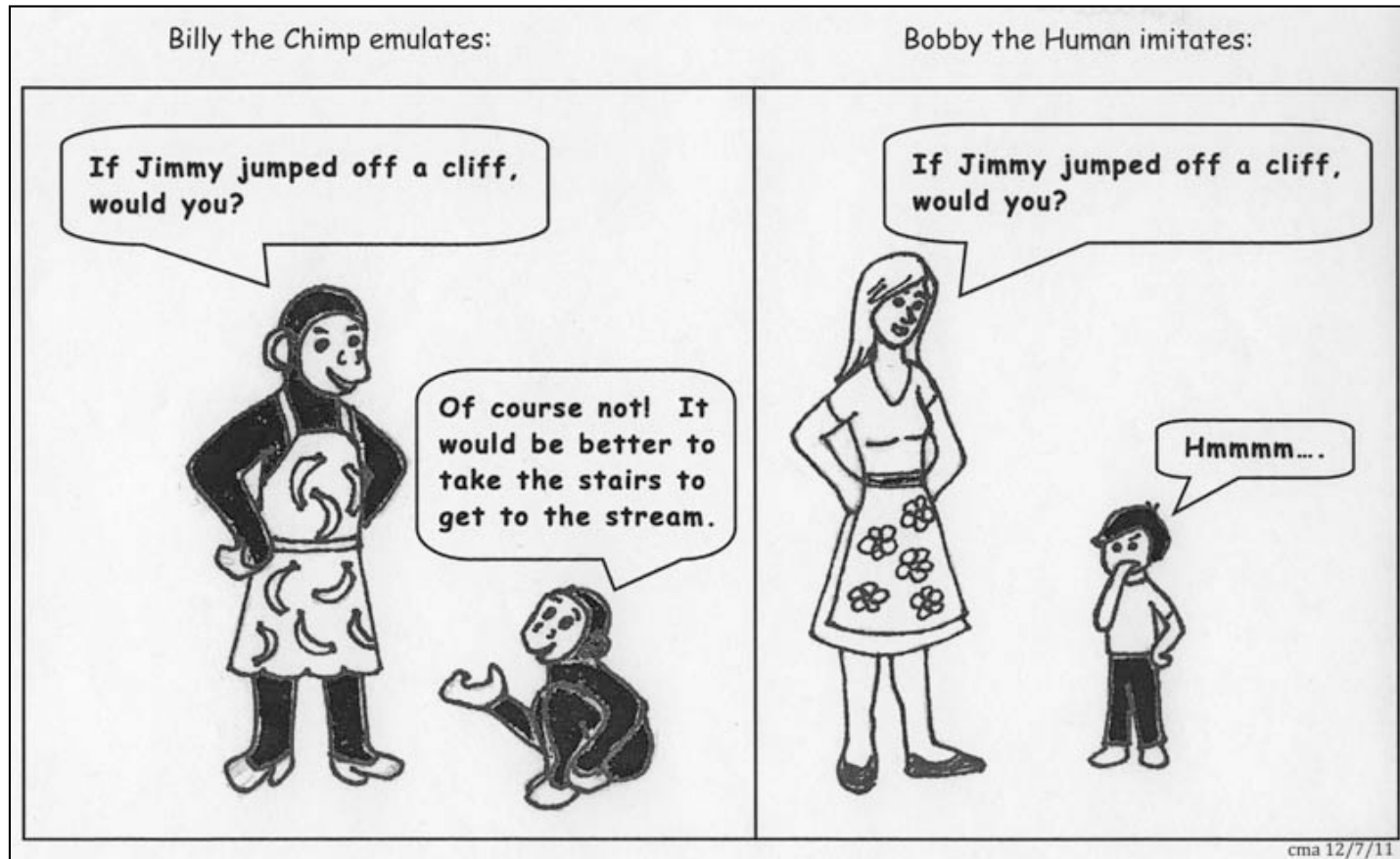
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Background: Absenteeism Problem in Construction

- Definition of Absence
 - “Failure to report for work as scheduled” (Johns 2008)
 - Voluntary VS Involuntary
- Absenteeism Problem in Construction
 - Absence rates in construction
 - 6% - 10% absence rates in electrical construction in US (Hanna et al. 2005)
 - 8.6%, 9.3%, and 8.5% absence rates in 2006, 2007, and 2008, in Alberta, Canada (Sichani et al. 2011)
 - Impact of absenteeism in construction
 - 24.4% of the productivity loss when the absence rate is between 6 and 10%, whereas 3.8% of the productivity gain when the absence rate is between 0 and 5%, and 9.13% productivity loss on average (Hanna et al. 2005)
 - The cost of absence 50% (carpenter) and 9% (laborer) greater than the his/her daily wage (Nicholson et al. 2006)
 - Increased likelihoods of accidents (Firms et al. 2006)

- **Social Influence on Workers' Absence Behavior**
 - Workers' susceptibility to social controls and the attendance dynamics (Johns 2008)
 - Absence norms as a key predictor of absence behavior in work places (Johns 2008; Bamberger and Biron 2007; Rentsch and Steel 2003; Xie and Johns 2000; Gellatly and Luchak 1998; Martocchio 1994; Mathieu and Kohler 1990; Nicholson and Johns 1985)
 - The variability of individuals' absence behavior within a unit & across units (Rentsch and Steel 2003)

Background: Behavioral Modeling



[Source: <http://hawaii.edu/fishlab/Nearside/Emulation%20vs%20Imitation.jpg>]

“Fortunately, most human behavior is learned observationally through modeling.” - Albert Bandura, Social Learning Theory, 1977

■ Group Norms

- Values, attitudes, and customs shared by a group of people
- Behavioral norms: shared perception of appropriate behaviors (Bandura 1977)
- Descriptive norms VS Injunctive norms
- Examples of behavioral norms in construction
 - Safety behavior norms
 - Break time norms
 - Absence norms
 -

A Question from the Methodological Standpoint:

HOW CAN WE MEASURE THE NORMS?

Method: Norm Elicitation Protocol

■ “A Vignette”

Behaviors

(Given Situation: *James is a member of your crew, and he has been working with you since your crew started to work at your project site*)

Behavior 1 *James takes absence without a notice when he does not want to work.*

Behavior 2 *James takes absence when he does not want to work, and he informs his absence to his foreman early in the morning.*

Behavior 3 *James takes absence when he has a hangover, and he informs his absence to his foreman early in the morning.*

Behavior 4 *James takes absence when he has minor illness such as colds and headaches, and he informs his absence to his foreman early in the morning*

Behavior 5 *James takes absence when he has some personal situation like sickness of a family member, and he informs his absence to his foreman early in the morning*

Behavior 6 *James takes absence when he feels too sick to work well, and he informs his absence to his foreman early in the morning.*

Behavior 7 *James does not take absence at all unless he has an emergent situation like severe injury or sickness.*

- Rating Task
 - Very Appropriate (= 1)
 - Somewhat Appropriate (= 1/3)
 - Somewhat Inappropriate (= - 1/3)
 - Very Inappropriate (= -1)

Method: Norm Elicitation Protocol

- A Coordination Game Structure

*“Your responses will be compared with the responses of a randomly selected member of (**your in-group**), and you will receive \$10 for each of the matched responses.”*

*“Your responses will be compared with the responses of a randomly selected member of (**an out-group**), and you will receive \$10 for each of the matched responses.”*

Method: Norm Elicitation Protocol

- “Two Passes”

Participant	1 st Pass	2 nd Pass
Workers	Matching target: Other workgroup members	Matching target: No one
	Workers' perceived group norms	Worker's personal standards
Managers	Matching target: Workers	Matching target: Other managers
	Manager's belief about workers' social norms	Manager's desired norms

Method: Participants

- Site A
 - A large-sized engineering research complex building
 - Located at Ann Arbor, Michigan
 - Experiment conducted during May 2014
 - 26 workers and 3 project managers participated



Method: Participants

- Site B
 - A large-sized library building retrofit project
 - Located at Ann Arbor, Michigan
 - Experiment conducted during September 2014
 - 45 workers and 3 project managers participated

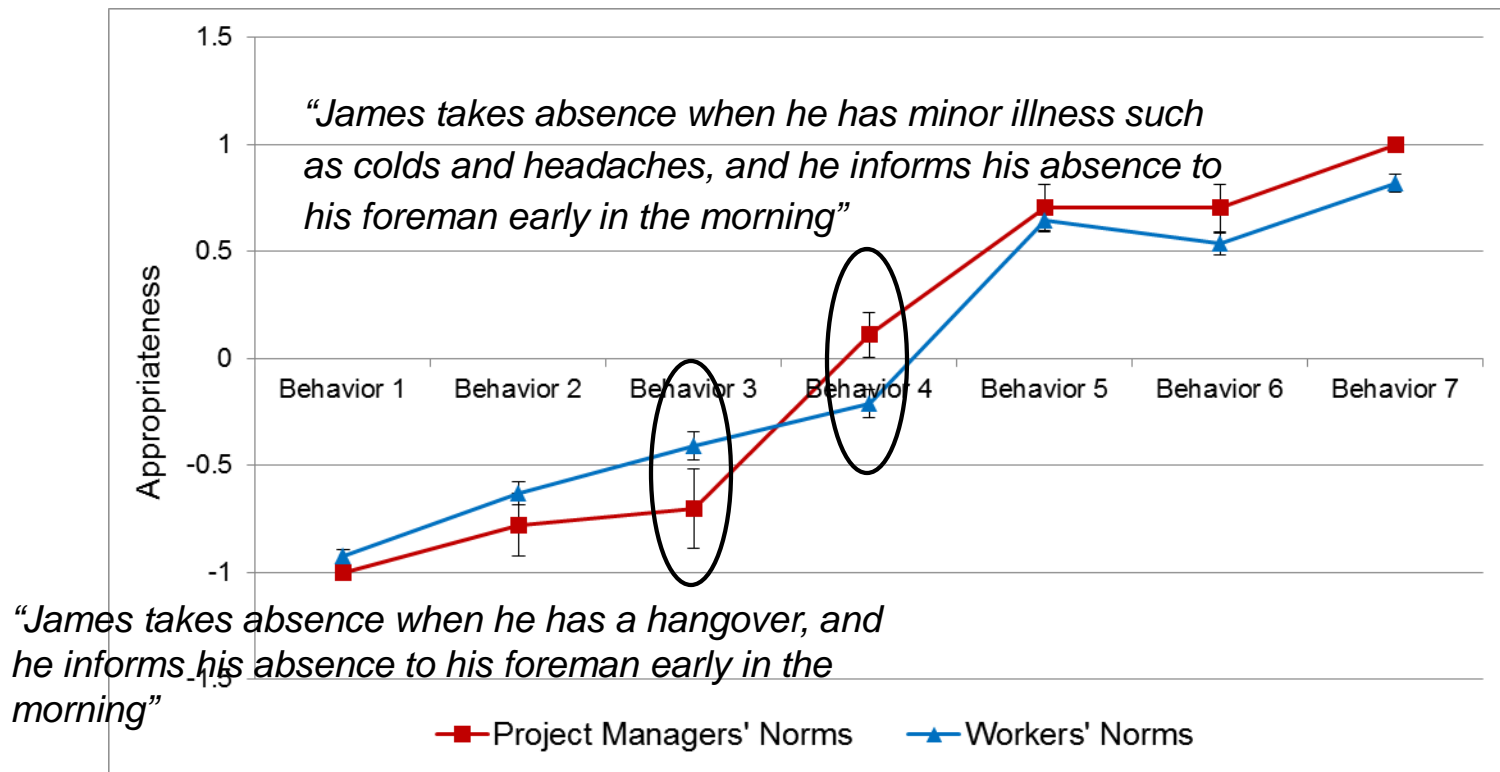


Method: Participants

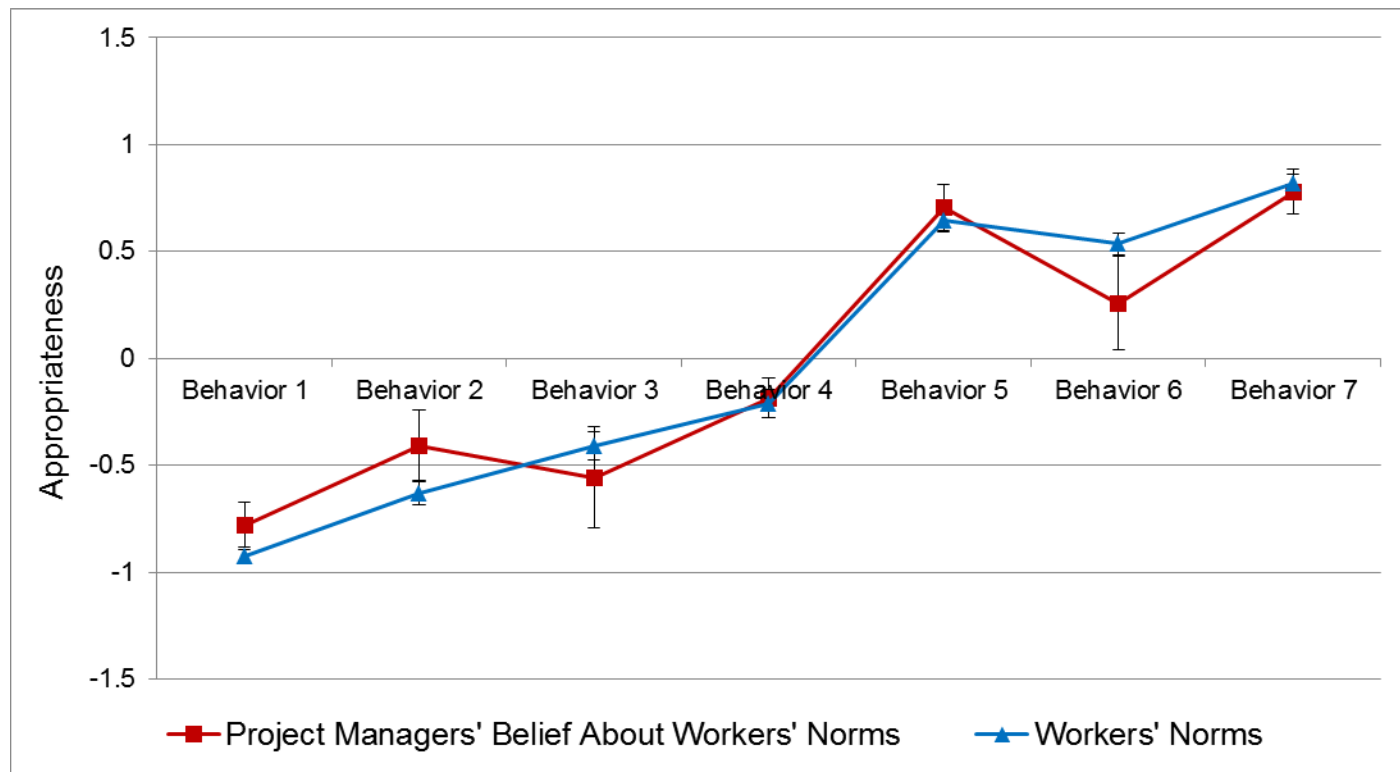
- Site C
 - A large-sized research facility interior renovation
 - Located at Ann Arbor, Michigan
 - Experiment conducted during December 2014
 - 35 workers and 3 project managers participated



Workers' Social Norms VS Project Managers' Desired Norms

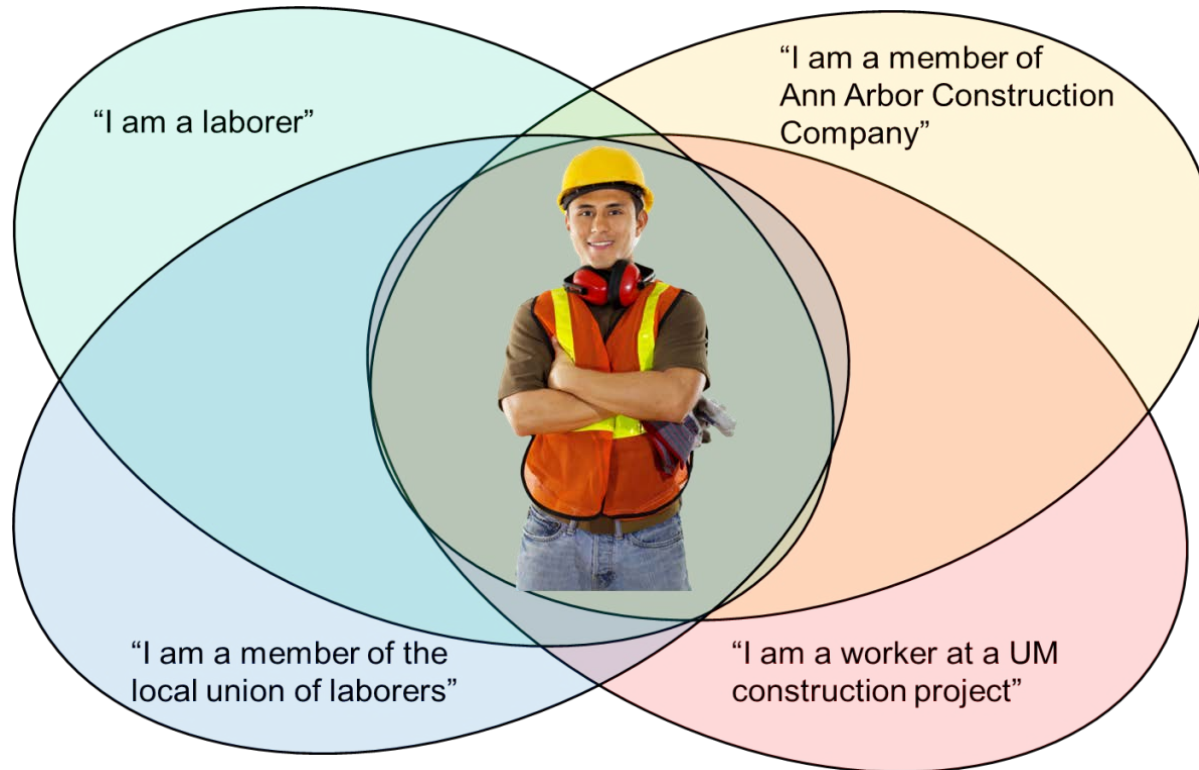


- Project Managers' Belief About Workers' Norms VS Workers' Actual Social Norms



Social Norms and Social Identities

- Construction workers' social identities
 - Multiple and temporary nature of membership
 - E.g., workgroup, company, trade, union, project, etc.



Social Norms and Social Identities

- Significant Correlations Between the Personal Standards-Desired Norms Misalignment and the Social Identification Measures

Measures		Project Membership Satisfaction	Project Membership Pride	Trade-Self Identity Overlap
$M_i^{\text{MDN,PS}}$	Pearson Correlation	-0.44	-0.40	0.41
	Significance level (2-tailed)	0.023	0.041	0.036

Note. N=26

Practical Implications of Workers' Behavioral Norms

- Importance of norms for human resource management
 - Norm as a “motivational capital” (Akerlof and Kranton 2003)
 - Durable behavior change (Akerlof and Kranton 2000; Akerlof and Kranton 2005)
- Application areas
 - Attendance
 - Safety
 - Engagement
 - And, more...



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