Humanizing User Influence Tactics in the Quest to Reduce Resistance Against IT Project Management Methodology Use

Kunal Mohan  
EBS Universität für Wirtschaft und Recht  
kunal.mohan@ebs.edu

Frederik Ahlemann  
EBS Universität für Wirtschaft und Recht  
frederik.ahlemann@ebs.edu

Anol Bhattacherjee  
University of South Florida  
abhat@usf.edu

Abstract

Despite the benefits of using an IT project management methodology, only a handful of organizations are actually able to make their staff use such methodologies. Hence, organizational managers must identify and apply user influence tactics (UIT), to ensure adequate and appropriate use of these methodologies within their organizations. In order to understand the complex nature of UITs and their effects on employees, we use needs theory and develop and test a conceptual model based on a pre-test sample of 65 participants to address the following issues: 1) the need for an abstract taxonomy of UITs to group together similar tactics so as to reduce complexity as well as increase generalizability and results comparability, and 2) the need to examine innate desires of the employee, since the likelihood that a specific UIT will be effective in motivating an individual to use a methodology depends upon the characteristics of the potential adopter as well as that of the methodology.

1. Introduction

IT project management methodologies (ITPMM) are tested bodies of methods and formalized rules that organizations can employ to devise pragmatic, cost-effective, and timely solutions to organizational problems in a systematic, replicable, and predictable manner. Examples of ITPMMs used by contemporary organizations include PRINCE2, CCPM, PMBOK, O2PM etc. Some of the most fundamental advantages that justify the use of structured IPPMMs are [1]: i) they reduce complexity by subdividing the projects development and management process into plausible and coherent steps, ii) they increase transparency and therefore control of the activities, thus reducing risk and uncertainty of projects, and iii) they provide a goal-oriented framework that helps to direct the application of techniques and resources at appropriate times during the project. However, despite the benefits of using a methodology, only a handful of organizations are actually able to make their staff use such methodologies [2]. For example, Cicmil et al. [3] found that resistance towards the acceptance of project management methodologies is high because users do not have faith in the concept, fear power loss, or lack adequate training and support from upper management. The potential benefits of methodologies cannot be realized if these methodologies are not used by organizational members who can benefit from their use. Hence, organizational managers must identify and apply strategies, which we call user influence tactics (UIT), to ensure adequate and appropriate use of these methodologies within their organizations. Relevant research in the fields of organizational change, and leadership have examined user influence tactics, by drawing on theories and research findings in social psychology, sociology, and political science. In these studies, UIT refers to the type of behavior one person (the ‘management’) uses to influence the attitudes or behavior of another person (the ‘employee’) [4] – to accept new ideas, practices, or products. While previous work is valuable, most of it focuses on interorganizational influence tactics – e.g., [5-7] – thereby ignoring the effects on the people that work in these organizations. Furthermore, as Falbe and Yukl [8] point out, very few findings have been significant, and not all findings are consistent across studies. While this inconsistency may be the result of inadequate sample sizes or research designs, it may also be attributable to neglecting the role of individual differences (e.g., personality characteristics) since people with different values, needs, and desires react differently to different tactics [9].

To our knowledge, no research has systematically examined the different UIT or their effects on methodology adoption or the role of personal traits in methodology adoption. ITPMM adoption is a complex decision process requiring significant know-how and resources on part of the potential adopter. In light of this gap in the literature, our research questions of interest are: (a) Which UITs are most influential in motivating an organizational member to use a certain methodology? b) How do individual characteristics influence the potential impact of these UITs? The remainder of the paper is organized as follows: Section 2 defines the prior literature, and key theoretical
concepts. In Section 3, we present our research model and hypotheses. In Section 4, we discuss the implications and limitations of our study and describe the next phase of confirmatory testing of our research model in section 5.

2. Conceptual Background

Previous research has made considerable progress in identifying context specific proactive tactics. Kipnis et al. [7] developed a self-report questionnaire called the Profiles of Organizational Influence Strategies (POIS) to measure eight tactics they identified which were used in upward influence behavior. After conducting a factor analysis of POIS data from samples of employees who rated their own use of the tactics in upward influence attempts with their boss Schriesheim and Hinkin [12] found support for six of the influence tactics (i.e., rationality, exchange, ingratiation, assertiveness, coalition, and upward appeal). A decade later, Hochwarter et al. [13] conducted confirmatory factor analysis of data from samples of students and university employees and came to similar conclusions. Over the years POIS has been used in many studies (see [14], [15] generating highly inconsistent results with Rationality being the only POIS tactic found to be consistently effective for proactive influence attempts [4]. In order to provide multi-source feedback to managers another taxonomy was developed based upon the research with the Influence Behavior Questionnaire (IBQ) [16], [17] which consisted of the six POIS tactics and four new ones (i.e., consultation, inspirational appeals, personal appeals, and legitimating) based on the leadership and power literature. Recently the IBQ was revised and found support for two additional tactics [17]. The early version of the target IBQ was used in several studies on antecedents and consequences of proactive tactics but once again with inconsistent results (e.g., [18], [19]).

Despite the valuable work done to date, many aspects of the dissemination of methodologies remain unexplored. One such area is the conditions under which UITs are most influential in motivating individuals to use methodologies. This is an important concern since, no matter how well designed a UIT might be, it can be considered a failure if it is not actually able to induce the employees to adopt the methodology as planned. We realize that, in order to understand the complex nature of UITs and their effects on employees, the following issues need to be addressed: 1) the need for an abstract taxonomy of UITs to group together similar tactics so as to reduce complexity as well as increase generalizability and results comparability, and 2) the need to examine innate desires of the employee, since the likelihood that a specific UIT will be effective in motivating an individual to use a methodology depends upon the characteristics of the potential adopter. In the sections that follow, we address each of these issues so as to develop a holistic conceptual model to understand and predict the effectiveness of UITs. We define each of the determinants and provide theoretical justification for our hypotheses.

2.1. User Influence Tactics (UITs)

The most significant contribution towards developing framework taxonomy of influence tactics is Chin and Benne’s [20] seminal work on three leadership strategies of planned change: (1) rational-empirical, (2) normative-reeducative, and (3) power-coercive. Subsequent change strategies mentioned in literature (see Table 1) can be traced back to one of Chin and Benne’s categories. Furthermore, of all the influence strategy taxonomies reviewed, Chin and Benne’s taxonomy is the most parsimonious. We therefore employ Chin and Benne’s classification to (a) operationalize the UIT constructs of this study, and (b) explore new strategies that are not accommodated within Chin and Benne’s framework. Table 1 provides an overview of these strategies from past studies, and maps them to our specific UIT categories. Although each of the UIT is unique, management may use a combination of UITs, rather than a single tactic, to motivate individuals to use ITPMMs [6].

The rational-empirical UIT is rooted in the belief that human actions are based on their ability to reason and critically evaluate relevant information. According to this UIT, the employee will adopt a methodology if adoption is logically justified and if the management is able to effectively demonstrate the methodology’s benefits or its relative advantage. While research states that such rational-empirical tactics are often used in organizations, their effect on actual behavior is found to be low and inconsistent [20], [21]. For example, promises have been usually viewed as an attractive influence strategy in the social psychology literature in that they have been hypothesized to help reduce interpersonal conflict and increase attraction of the target towards the agent [6]. Nutt [22] show the positive effect of rational-empirical strategies. They explored what strategies top managers in health organisations considered to be most effective in implementing change and found that bargaining and incentives were considered to be effective. However, Kasulis and Spekman [23] indicate that the utility of offering rewards is subject to diminishing returns [6]. In another study Nutt (1998) investigated the
effectiveness of four change implementation tactics and came to the conclusion that persuasion was not the most successful of the implementation tactics observed and rated lower than intervention. Zaltman and Duncan [24] also find that facilitative tactics are more successful than persuasion strategies because of their ability to invoke commitment among targets. Falbe and Yukl [8] analyzed incidents described by targets and found that rational persuasion and exchange tactics were intermediate in effectiveness.

One reason for the inconsistency in previous findings may be that, as confirmed in recent empirical research, this UIT may actually comprise two different tactics, focusing on (a) tangible or intangible materialistic benefits, and (b) utilitarian or task-related benefits, whose independent effects are often confounded. These two rational-empirical strategies, labeled rational-materialistic and rational-utilitarian strategies respectively, are discussed below:

Rational-materialistic UIT (RM-UIT) refer to tactics that attempt to influence users by informing them of tangible or intangible rewards (monetary advantages, respect, promotion, etc.) that can be acquired as a result of methodology use. In such a scenario, employees may decide to use the methodology even if he or she is not convinced of the methodology’s utilitarian value but because of personal benefits. The theoretical foundation of this UIT is found in economic theories and reflected in the concept of homo economicus (or economic human), according to which people display economic rationalism and are driven solely by the desire to maximize materialist objectives. In the (currently dominant) school of microeconomics, rational choice theory also uses this specific, narrow definition of “rationality” to imply that all individuals seek to maximize personal materialistic advantage.

Rational-utilitarian UIT (RU-UIT) are tactics that attempt to influence users through anecdote, demonstration, and rational appeals by experts regarding the work-related benefits that can be expected from methodology use. In such a scenario, the employee may use a methodology because he or she is convinced of its instrumental benefits (e.g., increasing task performance, efficiency, and productivity). The concept of homo reciprocans (or reciprocal human) provides the theoretical basis for RU-UIT, according to which people are viewed as rational actors who will compromise in order to achieve a balance between what is best for them and what is best for their employing organization.

Cooperative UIT (C-UIT) are based on the idea that adoption will increase when methodologies are the result of a cooperative, participatory development effort. C-UITs therefore revolve around user participation in designing, developing, and implementing the methodology. Both management and employee value principles of representation, participation, equal rights and opportunities, right of dissent, due process, responsibility, and access to information. In contrast to rational UITs, where data and information regarding methodology use are collected and processed only by the management and the results are communicated to the employee, C-UITs is the collaborative process of collecting and testing relevant data from various levels and consensually validating and improving the results [25]. Participation of the user in designing, developing, and implementing the methodology is the distinguishing feature of this strategy. Zaltman and Duncan [24] also argue that reeducative strategy might be the most influential tactic. Falbe and Yukl [8] also find that consultation tactics were most successful in their study. Nutt (1998) come to a similar conclusion and find that participation was a highly successful strategy. In the context of involving users in research efforts Beyer and Trice [26] suggest that affective bonding would facilitate compliance. Kanter [27] also suggests that involvement of the targets in the decisions about change would cultivate an environment of cooperation.

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Rational-materialistic UIT</strong></td>
</tr>
<tr>
<td>Incentives A</td>
<td>Tangible or intangible rewards are used to coax preferred behavior</td>
</tr>
<tr>
<td>Exchange B, C</td>
<td>Involve explicit or implicit offers by management to provide a favor or benefit to a employee in return for doing what the management requests</td>
</tr>
<tr>
<td>Bargaining A, C</td>
<td>Negotiation tactics are used to compromise with antagonists; the use of negotiation through the exchange of benefits or favors</td>
</tr>
<tr>
<td>Promises D</td>
<td>The management promises the employee a reward if the employee complies with a request</td>
</tr>
<tr>
<td>Inducements E</td>
<td>Use of compensatory mechanisms</td>
</tr>
<tr>
<td></td>
<td><strong>Rational-utilitarian UIT</strong></td>
</tr>
<tr>
<td>Rational- persuasion</td>
<td>Utilitarian benefits of change are presented through anecdote, demonstration, reasoning, and rational appeals by experts</td>
</tr>
</tbody>
</table>
Create a link between experts and employees. The expert is expected to develop awareness about task-related benefits through rational arguments and drawing on knowledge to promote adoption.

Create a need for change in the employee’s mind by presenting the need for action as a performance gap and demonstrating how adopting the methodology helps fill the gap.

Management predicts that the employee will become more productive if the employee follows the management’s suggestions based on sound information.

Cooperative UIT

Management seeks employee’s participation in developing a methodology for which the employee’s support and assistance are desired, or the management is willing to modify a proposal to deal with the employee’s concerns and suggestions.

Strategy emphasizes involvement of employees in the development and implementation to learn from their perceptions.

Involvement in decisions about change

Management seeks to establish the legitimacy of a demand from employee by claiming the authority to make it or by verifying that it is consistent with organizational policies, rules, or traditions.

Imbalance of power used to issue directives

Management uses demands, threats, and intimidation to influence a employee to carry out a request.

Management threatens employee with a future penalty if the employee does not comply with a request.

Management cites a legalistic, contractual, or informal agreement that requires the employee to perform a certain action.

Use of a direct and forceful approach with another person

Power-coercive UIT (PC-UIT) is based upon the application of authority. Most conceptions of power are founded on Weber’s classic definition of power as the probability that a person can carry out his or her own will despite resistance. To be more specific, two of French and Raven’s five bases of Power provide a more holistic understanding of the origination of coercive power. According to them, management’s (M) power over an employee (E) is determined by (1) M’s ability to punish E if E does not comply with M’s wishes (coercive power), and (2) M’s legitimate right to prescribe behavior for E (legitimate power). Employees under power-coercive influence are not consulted. Management adopt or develop a methodology and simply announce its implementation and demand target employees to use it. In such a situation the employee is forced to use a methodology even though he or she does not perceive it to be beneficial.

The use of such tactics causes anxiety, stress, depression, and might deprive the targets of basic needs of independence, respect and equal rights.

<table>
<thead>
<tr>
<th>Table 2: UIT related research hypotheses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H1</strong>: Rational-materialistic <strong>UIT (RM-UIT)</strong> will be negatively associated with methodology use (MU)</td>
</tr>
<tr>
<td><strong>H2</strong>: Rational-utilitarian <strong>UIT (RU-UIT)</strong> will be negatively associated with MU</td>
</tr>
<tr>
<td><strong>H3</strong>: Cooperative-UIT (C-UIT) will be negatively associated with MU</td>
</tr>
</tbody>
</table>
H4: Power-coercive-UIT (PC-UIT) will be positively associated with MU

2.2. Personal Characteristics

Over the past few decades, various needs-based theories, such as Maslow’s hierarchy of needs [34], have been developed to understand and predict human behavior. These theories have assumed prominence in research studies because human beings are known to act in a way to meet their own needs. Many definitions of basic needs have been proposed, of which the one by Ryan and Deci [35] is most consistent with the scope of this study. They indicate that “a basic need, whether it be a physiological need or a psychological need, is an energizing state that, if satisfied, conduces toward health and well-being but, if not satisfied, contributes to pathology and ill-being” [35]. In the current context of UITs, employees may be influenced by a certain UIT if that tactic meets their personal desires and needs. Conversely, UITs not aligned with the employee’s needs are likely to be ineffective or ignored. As a result, needs are modeled as moderators in our conceptual model. The related research hypotheses are summarized in table 3. The moderators are expected to affect the explanatory power of the influence of different UITs on a person’s methodology usage behavior. Our research specifically focuses on moderating effects because, besides the examination of direct effects, scholars are increasingly seeking to understand complex relationships [36]. While the importance of moderation effects has been emphasized repeatedly in the literature [37], its neglect has led to a lack of relevance as “…relationships that hold true independently of context factors are often trivial” [36].

In our study, we employ Murray’s theory of psychogenic needs [38], as it is considered the most fundamental and comprehensive list of underlying psychological human needs and has been empirically tested in a number of studies:

1) Need for autonomy (nAut) refers to an individual’s desire to be independent, free, and self-directing [38]. It is the need to be able to have a conscious choice about ones actions and decisions and these actions to be in a sense entirely one’s own and no one else’s. Individuals with a high need for autonomy are expected to avoid situation where they have to cooperate with others and therefore compromise their own beliefs and wants. Employees high in nAut might feel that their free will to do only what they want is being jeopardized when they are forced to be flexible and cooperate with others to reach a solution. As a result, we propose that nAut will have a moderating effect on the strength of the effect of cooperative UIT → resistant use.

2) Need for achievement (nAch) refers to an individual’s desire to do things better, accomplish difficult tasks, overcome obstacles, be an expert, achieve high performance standards, or realize significant task-related accomplishment [38]. Employees with a high need for achievement will only use a methodology if they can be convinced that the methodology will enable them to achieve high performance and productivity. It is expected that such employees will react positively to cooperative development efforts and be less resistant to using a methodology. This is because such individuals may perceive cooperative development as an opportunity to influence methodology attributes and align them to their own skills and work patterns. We therefore propose that nAch will have a moderating effect on the strength of the effect of cooperative UIT → resistant use.

3) Need for cognition (nCog) is the desire for knowledge [38] as well as the need to explore and discover new things. Individuals high in need of cognition tend to derive meaning, adopt positions, and solve problems by their desire to seek, acquire, think about, and reflect back on information to make sense of events in their environment. They are more likely to form their attitudes based on the merits of relevant arguments. Such individuals are expected to react positively to rational UITs that convey through means of sound reasoning and expert advice, based on valid and reliable data, about the benefits of using a methodology. Consequently, we expect nCog to have a moderating effect on the strength of the effect of rational-utilitarian UIT → resistant use.

Empirical research has shown that the above mentioned needs are largely uncorrelated with one another. Although many such needs are described in the literature, we focus our research on these four needs as they represent fundamental high-level primary, innate, or “hard-wired” needs that provide the basis for deriving secondary needs such as need for play and need for curiosity (derived from nCog), need for contrarience, need to compete or win, and need for acquisition (derived from nAch). Our focus on the primary needs helps us maintain a parsimonious model that is also empirically testable using a reasonable sample size.

Table 3: Needs related research hypotheses

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H5:</td>
<td>The influence of C-UIT on RU is moderated by nAut such that the effect will be weaker for individuals with the specific need.</td>
</tr>
<tr>
<td>H6:</td>
<td>The influence of C-UIT on RU is moderated by nAch such that the effect will be stronger for</td>
</tr>
</tbody>
</table>
individuals with the specific need.

H7: The influence of RU-UIT on RU is moderated by nCog such that the effect will be stronger for individuals with the specific need.

3. Methodology and data

In the current stage of our research we have developed a survey instrument and conducted a pre-test. Following we outline our data collection and analysis in this context.

3.1. Data collection

The entire development process, leading to the final survey instrument, was conducted according to Straub’s [39] recommendations. An initial pool of reflective measures was selected, based on their empirical validation in prior research. Instrument refinement was conducted based on interviews with 2 subject matter experts, Q-sorting exercise in 2 rounds with 7 and 8 participants respectively, and a web-based pre-test with 65 participants. Finally, all items were embedded in survey questions using a 7-point Likert-type scale anchored at strongly disagree (1) and strongly agree (7). Throughout the entire instrument development process, three researchers were always involved, discussing every issue and formulating improvements. This triangulation of researcher and methods provides stronger substantiation of a valid and reliable instrument. Data was collected via an online survey for a period of three weeks. Participants for the study were randomly chosen utilising databases of professionals (e.g., XING, Viadeo, CompetenceSite), with keyword search such as project manager etc. This approach was chosen so as to elicit a wide representation by industry and company size. We then sent a personalised URL of the online survey to every individual identified in such a manner. Personalised survey URLs were administered to a total of 982 individuals, of which 65 participants completed the survey, representing a 6.9% response rate. Reminders have not been sent yet.

3.2. Data analysis and results

The research model was tested and the psychometric properties of the scales were assessed with the software SmartPLS (version 2.0 M3), based on partial least squares (PLS). We used PLS because, compared to covariance-based approaches, it is advantageous when the research model is relatively complex and has a large numbers of indicators and a small sample size. We followed Chin et al.’s [37] as well as Carte and Russell’s [40] guidelines and recommendations to test and analyse interaction effects with PLS. The process includes three steps [37]: 1) standardising indicators for the main and moderating constructs, 2) creating all pair-wise product indicators (i.e. each indicator from the main construct is multiplied with each indicator from the moderating construct), and 3) using the new product indicators to reflect the interaction construct. The statistical significance of the parameter estimates was assessed using a bootstrapping procedure with 1,000 resamples.

Validation of the measurement model: The adequacy of the measurement model was assessed by the reliability of individual items, internal consistency between items, and the model’s convergent and discriminant validity. Cronbach’s alpha (CA) reliability estimates were used to measure the internal consistency reliability. In this study, the CA of each construct is greater than 0.63, which indicates a strong reliability for all constructs in our model. We also followed the Chin’s [41] suggestion and calculated composite reliability (CR) as an alternative to CA. The CR values for all constructs are higher than 0.84, above the recommended minimum of 0.70. Convergent validity is demonstrated as a) the AVE (average variance extracted) values for all constructs were higher than the suggested threshold value of 0.50, and b) all item-loadings were higher than 0.67 and statistically significant at the 0.001 level. Evidence of discriminant validity could be found, since a) the square root of all AVEs were larger than interconstruct correlations, and b) all construct indicators loaded on their corresponding construct more strongly than on other constructs [41], and the cross-loading differences were much higher than the suggested threshold of 0.1. For a variable to be a moderator, it is desirable that the variable has low correlation with the predictor (independent) variable, because multicollinearity can lead researchers to falsely conclude that moderation effect exists, when there is in fact a nonlinear effect in disguise. In our study, the inter-correlations are relatively low, ranging from 0.00 to -0.07 with an average of -0.04. This suggests that this error is unlikely. Although the primary aim of the pre-test was to test the validity and reliability of the scales, next we also examine the structural model results to get a feeling of how our model performs. However, we must keep in mind that the small sample size and high model complexity make model testing results unreliable.
Common method bias (CMB) was evaluated through the exploratory method of Harman’s one-factor test [42] revealing that a factor, at the most, accounted for just 29.23% of the variance. Based upon the results we contend that common method bias is unlikely to be a significant concern for this study.

Structural model results and discussion: After the validation of the measurement model, the structural model was independently analysed and the proposed relationships between the constructs were tested. Finally, we calculated the goodness of fit (GoF) of our model, as suggested by Wetzels et al.[43], who define GoF as the square root of the product of AVE and R². The application of this formula leads to a GoF of 0.59, which exceeds the cut-off value of 0.36 for large effect size of squared multiple correlations (R²), as proposed by Cohen [44] and allows us to conclude that our model performs well [43]. In assessing the PLS model, we examined the R² for each endogenous latent variable. The structural paths were evaluated for their significance. Proposed relationships were considered supported if the corresponding path coefficients had the proposed sign and were significant. Figure 1 shows the PLS structural model results. Three of the seven proposed hypotheses had a significant influence on resistant use of ITPPMs: H1 (β=.30, p<.05), H4 (β=.36, p<.05), and H6 (β=0.29, p<.05). Together, the variables explain 45% of the variance in the dependent variable RU. The fact that some of the hypotheses were found to be not significant was expected, since due to the small sample size the power of our model is very low and is therefore not able to detect small effect sizes [41]. However, this does not imply that these effects do not exist. It only means that we need to have a larger sample size to be able to test such a complex model with multiple three way moderating effects. Besides the analysis of statistical significance, the criterion of practical significance suggested by Kerlinger and Pedhazur [45] (i.e. considering path coefficients betas with values of .10 or higher to be important), which is repeatedly emphasized by researchers (e.g., [41]) suggests that H7 (β=.24), H8 (β=.12), H9 (β=.12), and H11 (β=.10) can also contribute to understanding the phenomenon under study.

Our preliminary results show that, as hypothesized, if management uses power tactics to pressure employees into using an ITPPM, it might result in the employees using the methodology superficially in a resistant manner. In such a scenario an employee is not intrinsically motivated to use the methodology, is not enthusiastic about it, and is likely to exercise no initiative and demonstrate no effort and persistence in order to use the methodology successfully.

However, regarding rational materialistic UIT we find that it increases resistant use and is opposite to what we had hypothesized. This might be because providing only monetary benefits and incentives purely in the hope that employees will use the methodology correctly might be perceived by some as “bribery” i.e. an act on behalf of the management to purposefully deceive methodology users regarding usefulness of the methodology and rather blinding their judgments by financial incentive. Individuals with a sense of moral

![Figure 1: Results based on a pre-test of 65 participants](Image)

<table>
<thead>
<tr>
<th>User Influence Tactics (UIT)</th>
<th>Needs</th>
<th>Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rational-materialistic UIT (RM-UIT)</td>
<td><strong>H1 = 0.30</strong> (1.61)</td>
<td><strong>R² = 0.45</strong></td>
</tr>
<tr>
<td>Rational-utilitarian UIT (RU-UIT)</td>
<td><strong>H2 = 0.20</strong> (0.82)</td>
<td></td>
</tr>
<tr>
<td>Cooperative UIT (C-UIT)</td>
<td><strong>H3 = -0.14</strong> (1.04)</td>
<td></td>
</tr>
<tr>
<td>Power-coercive UIT (PC-UIT)</td>
<td><strong>H4 = 0.36</strong> (2.18)</td>
<td></td>
</tr>
<tr>
<td>Need for cognition (nCog)</td>
<td>H7 = 0.18** (0.80)</td>
<td></td>
</tr>
<tr>
<td>Need for autonomy (nAut)</td>
<td>H5 = 0.29** (1.91)</td>
<td></td>
</tr>
<tr>
<td>Need for achievement (nAch)</td>
<td>H6 = -0.23** (0.77)</td>
<td></td>
</tr>
</tbody>
</table>

**p < 0.05; Path coefficients with t-values in parentheses**

or social responsibility, in particular, might revolt against this notion of management that they can simply “buy” their employees faithfulness and show their disapproval by resisting to use the methodology. In order to understand this effect better, we encourage researchers to use qualitative methods especially case studies, since it allows academics to dive deeper and explore the whole spectrum of possibilities. Quantitative studies can then be used to confirm the findings and improve generalizability.

A significant finding of our research is that we uncover that cooperative influence tactics do not necessarily motivate employees to comply with management’s requests. As hypothesized, we find that cooperative strategies are most effective with individuals who do not have a high need for autonomy. We plotted the complicated interaction effects in figure 2, to facilitate better understanding through appropriate visualization of the results. Looking at the figure we see that as cooperative strategies are used increasing by management, employees who have a high need for
autonomy might feel that they are losing their desire to make decision on their own. This dissatisfaction is then visible in the employees increased resistance to use the methodology. Our finding is contrary to what has been repeatedly reported in past studies and forces both researchers as well as practitioners to rethink their notion that cooperative influence tactics are always effective. In the case of individuals with high nAut the specific strategy can backfire.

**Figure 2. Moderating effect of need for autonomy**

Although the results are encouraging, we cannot yet, based upon the pre-test results, conclude that the resulting not significant hypotheses are invalid. It only means that we need an appropriate bigger sample to test such a complicated model with multiple three way interactions. We discuss how we plan to do this in the last section of this paper. Therefore, caution is in place when interpreting our preliminary results.

### 4. Conclusion

Our research seeks to understand the role of user influence tactics on organizational members’ use of new methodologies. We also explore how individual differences (needs of employees) shape one’s methodology use decision and/or moderate the effects of influence tactics that organizational managers may employ to motivate their employees to use a given methodology. To do so, we synthesize prior research on user influence tactics with that on individual needs into an integrated model to examine the joint effects of these different theoretical perspectives in a way that has not been attempted in prior research. Such influence processes and tactics are important for understanding how organizations motivate their employees to use new methodologies and why methodologies are differentially accepted within the employee population. Based on existing theories, we develop a conceptual model that describes how individual traits determine which type of influence tactics has a greater effect on an individual’s methodology usage behavior. The proposed multidimensionality of the UIT constructs represents a departure from traditional operationalization (which is devoid of contextual factors) and might reveal more complex and as-yet-unknown interaction effects on human decision-making in regard to the use of new methodologies. Our findings might have implications not only for the MIS research community, but also for related fields in that it might explain how different needs of an individual determine which UITs become more influential. Human needs have always played a key role in organizational development, and this study is an attempt to “humanize” organizational influence tactics, that is, to enable organizations to be more responsive to human concerns when executing influence tactics. We also analyze existing strategies that are usually employed by organizations (or authority figures) and create a theoretically and practically relevant taxonomy to categorize these large number of influence tactics (many of which underlie the same theoretical concept but are just named differently) in a pragmatic and parsimonious way. We therefore present researchers and practitioners with a framework to help identify and understand the tactics they use or intend to use in research or in practice. By specifically illustrating which strategies fit which category, we seek to provide interested parties with clear guidelines.

Our research also has significant implications for practitioners. Each of the proposed constructs reveals a different aspect of human behavior and personality, each of which can serve as a starting point for organizations in their attempts to steer individual actions in the desired direction with the help of tailor-made tactics. Our findings could help organizations manage the selection, development, and implementation of new methodologies. Another very promising focus area is how culture influences the effectiveness of influence tactics. Although the understanding of cultural influences has been repeatedly emphasized by top journal editors – for example, (Straub 2009) – it is seldom incorporated in research, generally because of data collection difficulty. Incorporating cultural differences in our study will further improve the generalizability of our findings as well as unlock new avenues for future research. A better understanding of these determinants would enable us to design organizational interventions that would increase usage of new methodologies to improve productivity and quality as well as to reduce effort.
5. Future Research

The final survey instrument will be administered web-based to a diverse population of ITPMM users to collect the quantitative data needed to test the model and hypotheses. We will consequently utilize various databases of professionals (e.g., LinkedIn, XING, CompetenceSite) via a keyword search. The keywords will be compared to entries in the members’ profiles, for example, fields labeled “interests” or “competencies I offer”. After the identification of possible study participants, we will then send a personalized URL of the online survey to every identified individual. Participants, who do not complete the survey four weeks after the original invitation, will receive a reminder email. We will then address the issue of non-response bias.

In order to understand the cultural influences, data will be collected from the USA, EU-nations, Switzerland, Australia, and India. We will attempt to include more countries, especially developing and Asian nations such as Japan, China, and African nations. Research based on Hofstede’s cultural dimensions has shown that individuals from these nations are governed by different attitudes, preferences, and norms than those in Western nations. After collecting the final sample, the scales will be assessed regarding their construct validity (including discriminant, convergent, nomological) and reliability, using commonly accepted techniques such as factor analysis and Cronbach’s alpha. Common method bias will be evaluated by Harman’s one-factor test exploratory method [42] and Podsakoff et al.’s proposed confirmatory method [46]. A significance test and power analysis will be conducted, while effect size will be determined to evaluate the proposed hypotheses’ theoretical and practical significance. We will calculate the effect size of the variables using the T-test. The difference between the squared multiple correlations is used to assess the overall effect size $f^2$ for the interaction, where it has been suggested that $f^2 < .02 = \text{practically no effect}$, $.02 \leq f^2 < .15 = \text{small effect}$, $.15 \leq f^2 < .35 = \text{moderate effect}$, and $f^2 \geq .35 = \text{large effect}$. In conclusion, use of ITPMMs remains a complex and elusive, yet extremely important, phenomenon. Past research has made progress in unraveling some of its mysteries. The development and testing of our model seeks to advance theory and research on this crucial matter.

10. References


[16] G. Yukl, R. Lepsinger, and T. Lucia, Preliminary report on the development and validation of the influence...