
Content Validation of a Situational Judgment Test of Manager's Integrity: A Qualitative Approach

Amna Rafique¹, Saima Ghazal²**Abstract**

Leader's integrity appears to be a significant predictor of their effectiveness (Moorman et al., 2012), however, little empirical evidence has been found to address this relationship. It may be due, partly, to unavailability of sound assessment tools in this area. Current research describes development and content validation of a situational judgement test to assess manager's integrity that will have potential benefits over existing unidimensional and Likert-type perceptual measures (Becker, 2005; Craig & Gustafson, 1998; Mills & Boardley, 2017). Ten managers and 7 subordinates from multinational organizations were interviewed for generating context specific situations and associated responses. Initially, 31 situations and associated 6-7 responses were extracted from interviews. Two independent rounds of subject matter experts (SMEs) reviews resulted in 22 situations and 3-5 associated responses. Finally, 16 situations and 3-5 associated responses were retained after calculating item content validity index (I-CVI) and scale validity index (S-CVI). The resulting test, labeled the manager's integrity-SJT, displayed high content validity. Thus, present study advances research in the field of leadership by developing a situational judgements test for assessing manager's integrity towards their subordinates that is pertinent predictor of leadership effectiveness (Moorman, et al., 2012).

Keywords: Leadership Effectiveness, Manager's Integrity, Situational Judgement Test, Tool Development

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Introduction

Effective leadership towards subordinates is considered as significant predictor of organizational failure or success while investigating the factors that play key role in organizational success (Bennis & Nanus, 1985). Effective leadership towards subordinates is significant and put crucial

effect on subordinate's various behaviors that may lead the organization to either success or failure (Denison et al., 1995). These behaviors range from subordinate's increased job satisfaction (Bass & Stogdill, 1990), subordinate's improved commitment and performance (Seltzer & Bass, 1990; Yammarino & Bass, 1990), increased subordinate's performance (Latham & Saari, 1979), increased subordinate's commitment to organizational goals and subordinate's willingness to take on and perform additional responsibilities (Cohen, 1984; Kanter, 1985), better decision making, subordinate's increased commitment to decisions (Vroom & Yetton, 1973), and increased subordinate's satisfaction and performance (Podsakoff & Todor, 1985).

Considering the key role of effective leadership for organizational success, Yukl

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(2008) emphasized the need to identify the leadership characteristics that are crucial to increase leader's effectiveness and organizational performance, however, regretted that the empirical efforts to identify the leadership characteristics and increase organizational performance outcomes are very slow. In this context, it is of great value to consider predictors of leadership effectiveness, so that supportive efforts, such as selection and training can be practiced to maximize effective leadership and desired organizational outcomes. Toward this end, the construct of manager's integrity appears one of the important and fundamental elements of effective leadership (Moorman et al., 2012) and keeping this in view, aim of current research was to develop and validate a situational judgement test of manager's integrity towards their subordinates.

Several succeeding considerations highlight the significance of developing a situational judgement test. First, personality tests have been widely used as an assessment tool for integrity but these tests have certain limitations, as these have focused on employee's integrity assessment not on leaders, and more general in nature too (Barrett, 2001). Personality tests are also not context based. Second, other than personality tests, few recent approaches that assess managers' integrity include likert type scales based on follower's perception / report about leader's integrity (Craig & Gustafson, 1998). Followers' report may be fallible while attempting to identify the leaders who are successful in presenting a false impression. Followers' perception of leader's integrity approach could be exaggerated and biased too (Price, 2003). Broadly speaking, these scales have issues of social desirability. Becker (2005) has also contributed to the field with a situational judgement test to assess employee's integrity. Although, it is a situational judgement test, but it does not assess manager's integrity. Moreover, Mills

and Boardley (2017) developed an implicit measure to assess leader's integrity but it is unidimensional (they only assessed behavioural integrity). Along with all preceding limitations of existing measures of integrity, none of the tool has been validated or developed in Pakistani cultural context. Therefore, the goal of current research is to develop an indigenous, bidimensional (moral behavior and behavioral integrity of the manager) and context specific scale for solely measuring manager's integrity using situational judgement test (SJT) approach.

Construct Domain to be Measured: Manager's Integrity

Although, it is argued that integrity is key analyst to effective leadership and this notion is oft-cited and asserted to the extent that it appears an axiom in the field of leadership (Bass & Steidlmeier, 1999; Craig & Gustafson, 1998; Howell & Avolio, 1995; Kirkpatrick & Locke, 1991; Parry & Proctor-Thomson, 2002; Peterson, 2004; Simons, 1999) but there is little consensus on the definition of integrity in leadership literature that has slowed down the efforts of empirical researchers to test foresaid claims and developing tools of measurements.

Business literature traditionally and generally followed two approaches to define integrity: i) integrity as actor's word-deed consistency (Palanski & Yammarino, 2007), and ii) second approach aligns integrity to moral behavior (Becker, 1998). First approach is only concerned with word – deed consistency regardless of moral values while the second approach is more concerned about morality of actions and less concerned with word-deed consistency. Moorman et al. (2012) concluded in their qualitative research that leader's integrity may be better defined as a construct capturing both integrity approaches: moral behavior and behavioral integrity. The current research used construct of integrity defined by Moorman et al. (2012).

Criterion Domain to be Measured: Leadership Effectiveness

In current research, leadership effectiveness is operationally defined as subordinate's perception who are satisfied with the activities exhibited and job behaviors of managers being evaluated. There are numerous manager's job behaviors and activities that fall within this broader domain. These include performance evaluation of subordinates, negative feedback, integration of subordinate's goals with the organization's goals, to resolve conflicts between subordinates (see Table 2 for complete list of behaviors). There are various reasons behind to suspect that integrity is one of the most important predictors of the leadership effectiveness in organizations. Integrity produces more effective organizational leadership. Lennick and Kiel (2007) also suggested that integrity is the hallmark of the morally intelligent person and one of four principles that are vital for sustained personal and organizational success. George (2010) also discussed the importance of integrity as a fundamental ingredient of all the efforts of leaders to lead in a best manner. Further, Becker (1998) emphasized that integrity is the hallmark of effective business leaders and referred the empirical efforts of Yukl and Van Fleet (1992), Bass and Stogdill (1990), and Kirkpatrick and Locke (1991) as supporting evidence. Therefore, leadership effectiveness appears an important criterion variable predicted by integrity. However, the degree with which literature has emphasized and portrayed the importance of leader integrity has slowed down the pace of empirical efforts to support such claims. Closer look to see the reasons behind, suggest that difficulty of measuring leader's integrity may be the leading cause that has far outpaced the empirical attention to the precise role of integrity in leadership in organizational setting. Therefore, goal of current research is to develop a situational judgement test to

assess manager's integrity. Development of SJT will serve many advantages over existing measures of integrity e.g. relevant content of the situation, contextual situations in which manager's integrity will be assessed in the context of leadership effectiveness.

Overview of SJTs and Current Study

SJTs are popular personnel selection tests. These are low-fidelity assessment composed of job-related scenarios that represent a dilemma or problem and include a set of possible predetermined solutions that vary in level of effectiveness (Lievens et al., 2008). Respondents have to draw on relevant knowledge, skills, or other characteristics to rate the effectiveness of behavior or action taken to solve a given problem. Rockstuhl et al. (2015) reported that SJT is a valid predictor of a range of workplace criteria. Literature has reported incremental validity of using SJTs in leadership studies as compared to self-reports which is the major strength of using SJTs (Christian et al., 2010; Fertig, 2009). Recent work has reported that SJT scores might largely implicate general domain knowledge or implicit personality theories (Lievens & Motowidlo, 2016). In current research, SJT score will implicate general domain knowledge. SJTs directly target a construct to be measured, such as team role knowledge (Mumford et al., 2008), leadership (Peus et al., 2013) or personal initiative (Bledow & Frese, 2009). In these latter of construct-focused SJTs, the construct in question is defined explicitly, and the theory underlying the focal construct is used as theoretical basis for expecting relations. Ultimately, various design features distinguish different types of SJTs (Arthur et al., 2014), therefore, it is pertinent to consider design choices in relation with construct to be assessed. The development of the SJT added significantly to the literature whereby it explicitly measures the propensity of manager's integrity towards the subordinates in relation to leadership effectiveness. The

following section highlights important design features for developing manager's integrity - SJT with a focus on developing reliable and valid tool for assessment.

SJT Design Features

In current study, the researchers considered 3 SJT design features suited to the research objectives: i) test content, ii) instructions for test takers and associated response formats: iii) third person approach to address respondent's socially desirable behavior. A preliminary stage for developing SJT is to consider the approach for creating situations and their associated response statements. Traditionally, there are two kinds of guiding approaches in this regard. First approach emphasizes content overlap with the criterion domain (Binning & Barrett, 1989) while second approach focuses on overlapping between test content focal construct to be measured (Haynes et al., 1995). Both the approaches appropriately address the manifestation of content validity as situations can be written to implicate the criterion domain while response items capturing the construct of predictor variable. In this regard, our guiding approach was to provide maximum evidence for content validity of test content, this objective was successfully achieved by conceptual overlap between the construct domain to be measured and test content. Accordingly, the researchers wrote the situations implicating the construct of leadership effectiveness categories and response items implicating the construct of leader's integrity in terms of moral behavior and behavioral integrity based upon (Moorman et al., 2012) definition of leader's integrity. Situations implicating leadership effectiveness behaviors provided the opportunity to the respondents to express the integrity through their judgements about the situations. Considering pertinent role of test content in SJT approach, current research paper focused on development and content validation of manager's integrity test- SJT.

Another important design feature was to consider response format and instructions for test takers. For the current SJT, respondents were instructed to provide their judgement about each situation by selecting one option from all. Traditionally, the SJT instructions have been either knowledge based or behavioral tendencies-focused, where respondents are asked what they would most likely do in this kind of situation (McDaniel et al., 2007). Current research will consider the second approach.

Lastly, it is also important to address respondent's social desirability and associated threats to validity (Furr, 2021). Keeping this in view, two design features were included in the current research, i) writing scenarios from third person perspective and ii) inclusion of the bogus scenarios. People have tendency for automatic activation of impression management process if the scenarios are written from first person perspective. Therefore, in order to create a sense of psychological distance from the situation, the scenarios were written from third person perspective. Literature reveals that writing the scenarios from a third person perspective benefits to minimize the automatic activation of impression management process, hence, resulting in less biased and genuine responses (Fisher et al., 2021). Secondly, people have potential for automatic or pattern based responding at one end of the scale that threatens the scale validity. In order to minimize this potential or pattern-based responding, two irrelevant and bogus scenarios were added at the beginning and middle of the SJT. Collectively, SJT design features were intentionally and thoughtfully selected in service of developing a reliable and valid SJT to assess manager's integrity.

Method

Development and content validation of SJT involved two independent rounds of i) critical

incidents from managers and subordinates and writing situations and responses, ii) SMEs reviews. The following section will describe the development of situations and their stems through critical incidents collected by managers and their subordinates, and then followed by SMEs reviews of the content of the SJT.

SJT Development

The scale was developed through an iterative process into three stages: the process was started with writing test content (gathered critical incidents from managers and subordinates), followed by subject matter expert review, and ended on refining test content.

Participants

Table 1

Participants Characteristics for all the Three Rounds (Study I)

Round	Participants	Sample Characteristics
Round 1	N=17., 10 managers., 7 subordinates	Criteria for managers: middle managers working in multinational companies in Lahore and Gujranwala., at least 10 years of experience Criteria for subordinates: working in multinational companies., at least 6 months of working experience with current middle manager
Round 2	N = 4., SME	Expertise criteria: experts from organizational psychology (2 SMEs) and management science (2 SMEs) Professional background: 3 SMEs currently working as associate professors in a well reputed university (Lahore) of Pakistan., 1 working as project manager in well reputed organization Gender distribution: 2 females., 2 males
Round 3	N = 7., SME	Expertise criteria: same as experts for round 2 Professional background: 4 SMEs from organizational psychology (1 PhD., 3 PhD scholars) and three from industry with the degree in management science (MBA executive) and working as manager in multinational companies in Lahore and Gujranwala Gender distribution: 4 females and 3 males

Procedure

Writing of Test Content

Scale development was started collecting critical incidents implicating construct of leadership effectiveness from managers and subordinates. Managers and subordinates

were instructed to describe critical incidents implicating leadership effectiveness behaviors resulting moral/ immoral decision by managers or high behavioral integrity / low behavioral integrity. Content of situations was written based upon the critical

incidents described by managers and subordinates. They were further asked to describe how do managers behave in such kind of situations (this was asked to generate item stems against each situation). Thus, situations were generated implicating the construct of leadership effectiveness and item stems implicated the construct of integrity (moral behavior and behavioral integrity). Initially, a pool of 31 situations was generated with 6-7 response statements per situation. The response statement length was targeted one to two sentences with the goal to capture the construct of integrity.

After generating situations and their responses, two independent rounds of SMEs reviews were conducted to evaluate test content. These two rounds have been described in the following section.

Refinement of Test Content

The test content was subjected to two independent rounds for refinement: first SMEs rated situations and appropriate responses in terms of high, medium and low levels of integrity, ii) second, the researchers calculated I-CVI and S-CVI for final test content

Initial Round for Refinement of Test Content

Participants and Procedure

Initial round of refinement was conducted following 7 steps, including i) preparing initial evaluation form, ii) selecting SMEs, iii) evaluating whether situations implicated leadership effectiveness behavior, iv) categorization of situations and associated responses whether moral behavior or behavioral integrity, v) rating responses as depicting high, medium or low integrity (moral behavior or behavioral integrity), vi) rating of content comprehensibility, vii)

whether situation are believable or not in organizational setting (see Table 3 for results of step no. iii, iv, vi and vii). 7 SMEs were invited for initial round of refinement and 4 SMEs gave consent. One of these SME was PhD in organizational psychology and two were having degree of PhD in management sciences. After their consent, SMEs were sent (printed) evaluation criteria form and initial pool of situations and responses. First, SMEs rated whether the behavior implicated leadership effectiveness using a 4-point scale (1 = Definitely No and 4 = Definitely Yes). Regarding response statements, SMEs indicated whether the 'statement [is] moral behavior or behavioral integrity. For evaluation of responses, SMEs were instructed to rate responses as depicting high, medium or low integrity. Minor editing resulted in appropriate use of terms and removal of redundancy; SMEs combined the responses that were implicating similar behavior. Finally, to confirm test clarity, the SMEs rated content of each item (items refer a situation and associated set of responses) in terms of whether they were easy to understand on a 4-point rating scale (1 = very difficult to understand and 4 = very easy to understand). At every step, the SMEs were given the choice to indicate if they were unable or unsure to make a categorization/rating. Further, credibility of test content was also assured in terms of whether they were believable in manager – subordinate relationship. The SMEs rated the test content on 4 -point rating scale (1 = very unbelievable and 4 = very believable). Ultimately, two independent rounds of refining test content resulted into 22 situations and 3-5 associated response items.

Table 2*Summary of Subject Matter Experts' Rating*

Rating	Expert's Review
Does the behavior implicate in situation leadership effectiveness? (4 – point rating scale)	$M = 3.77$
Classification of response statements	Moral behavior (12), behavioral integrity (10)
Is the item easy to understand? (4- point rating scale)	$M = 3.96$
Is the item believable? (4 – point rating scale)	$M = 3.93$

Note: Results are reported for 22 situations and associated responses.

Second Round of Content Validation (calculating I-CVI and S-CVI)

Participants and Procedure

Second round of content validation was aimed to calculate I-CVI (item content validity index) and S-CVI (scale content validity index) and it followed 6 steps including; i) preparing content validation form, ii) selecting a review panel of experts, iii) conducting content validation of situations and responses, iv) reviewing domains and items, v) providing score on each item (item refers situation and associated responses), and vi) calculating CVI (content validity index) (Yusoff, 2019). Content validation procedure started with the preparation of content validation form. The form comprised of instructions, rating scale and definition of the constructs. This was followed by recruiting participants (SMEs). Participants were subject matter experts from academia and industry (currently working in multinational organizations). Content experts were nominated based on their education and experience. Experts from academia were

having qualification either (one expert) PhD in organizational psychology or currently PhD scholars (3 experts) in organizational psychology. Two of experts from industry were PhD in management sciences, well versed in scale development process, relevant knowledge and experience, and one of experts from industry were having MBA degree and currently manager in a multinational organization. Prior consent was taken from all the experts. After their consent, content validation form was sent to them for review. The experts critically reviewed whether situations and their corresponding responses are implicating the constructs of leadership effectiveness and manager's integrity, respectively and rated the situations and responses as per the criteria provided in the content validation form. This was followed by calculating I-CVI (item content validity index) and S-CVI (scale validity index). Finally, 16 situations and 3-5 associated responses were retained. For I-CVI and S-CVI, see Table 3.

Table 3

Results of I-CVI and S-CVI by Content Experts for Manager's Integrity-Situational Judgement Test (SJT)

Item no.	Expert Raters							I-CVI	Experts Agreement	in UA
	1	2	3	4	5	6	7			
Q1	4	4	4	4	4	4	4	7	1	1
Q2	4	4	4	4	4	4	4	7	1	1
Q3	4	4	4	4	4	4	4	7	1	1
Q4	4	4	3	4	4	4	4	6	0.85	0
Q5	4	4	4	4	4	4	4	7	1	1
Q6	4	4	4	4	4	4	4	7	1	1
Q7	4	4	4	4	4	4	4	7	1	1
Q8	4	4	4	4	4	4	4	7	1	1
Q9	4	4	4	4	4	4	4	7	1	1
Q10	4	4	4	4	4	4	4	7	1	1
Q11	1	4	4	4	4	4	4	7	1	1
Q12	4	4	4	4	4	4	4	7	1	1
Q13	4	4	4	4	4	4	4	7	1	1
Q14	4	4	3	4	4	4	4	7	0.85	0
Q15	4	4	4	4	4	4	4	7	1	1
Q16	4	4	4	4	4	4	4	7	1	1
								S-CVI	0.91	0.87

Discussion

Construct focused and psychometrically sound assessment tools are considered one of the important steps for making predictions or claims in research. Current research was aimed to develop and validate a situational judgement test to assess manager's integrity. SJTs have been used for employee's selection procedure that help to identify the candidates that complement job with relevant knowledge and skills in that environment. Although, many empirical efforts have been reported in the literature that intended to assess employee's integrity for selection and hiring. But existing measures are having certain limitations as discussed earlier. Moreover, there is convincing evidence reporting that the ability of integrity to predict depends on the way how it is being measured. The most common method involves self-report measures in which participants directly respond to the items reflecting their attitudes and beliefs about integrity. Other than self-report, an implicit association test (IAT) has also been

developed to assess integrity. IATs are based on the notion that individuals process information about themselves out of their consciousness (implicitly). IAT assesses the strength of association between concepts through response time on combined discrimination task. But there are notable limitations to this test that assesses manager's integrity. First, the aforementioned IAT is unidimensional thus restricting the domain of the construct. Second, Nosek and Smith (2007) identified that IATs have low test-retest reliability. As efforts went through almost 100 years of trial and error to refine general mental ability construct (Ackerman & Heggestad, 1997), likewise, integrity construct needs to be furthered by novel attempts to conceptualize and measure. Thus, it was suggestible for I/O psychologists to explore integrity outside these traditional domains. Therefore, current research was aimed to develop a SJT-manager's integrity. SJTs have certain advantages over self-report and IATs, but are low fidelity measures too. These tests were first introduced by

Motowidlo et al. (1990) as low fidelity measures. Fidelity refers to which extent a selection procedure mirrors the actual job situation (Callinan & Rbertson, 2000). Although, in certain situations, high fidelity selection procedures are having certain advantages over low fidelity, but these are having high cost and require much resources. Comparatively, low fidelity is easy to administer on larger samples with fewer cost, resources and incremental validity over self-report measures too. Therefore, low fidelity test approach was chosen for current research.

Test development started interviewing managers and subordinates from multinational organizations. The benefit of selecting managers and subordinates for test development was two folded. First, SJT-manager's integrity was assumed to design the situations that revolve around manager-subordinate relationship, thus, strengthening the notion of contextualization. Second, they shared their own experiences. Therefore, managers and subordinates were intentionally and purposively recruited for interviews as they could share the real life incidents and experiences from workplace that are context based, and fulfill the objective of the study.

Next important step for test development is to choose a theoretical approach to the construct to be measured. In literature, a substantial number (33%) of SJTs are lacking in constructs and do not report enough information to define the construct. That limits the advancement in using and understanding SJTs for recruitment and disentangles the effects of measurement method from the constructs method. It further leads to serious implications for the use of test scores. As it makes it difficult to compare the predictors that are confounded by construct or method variance (i.e., comparing apples and oranges). Moreover, lack of constructs limits the generalizability of SJTs.

For example, a researcher reports .19 criterion related validity coefficient for a SJT in multinational organization, the only produced information here is that it predicts performance in that job, in that company only. And limits the use of SJTs across the job or industry (Christian et al., 2010). Therefore, underlying rationale behind using construct based approach was that it would provide systematic and common framework to understand and apply SJT. In current research, theoretical approach to integrity (Moorman et al., 2012) was applied to generate situations and response statements. In order to achieve the aforementioned objective, the scale development was benefited from various design features that helped to create construct focused scale. Dual focused approach facilitated to create situations implicating leader's effectiveness and responses implicating integrity in terms of moral behavior and behavioral integrity. Ultimately, this approach highlighted the value of content validity. This approach can be used as a model approach by future researchers to develop construct focused situational judgement test. Initially, context specific 31 situations and associated response items were generated to capture the construct through interviews from managers and subordinates in multinational organizations. Two independent rounds of expert's review, S-CVI, and I-CVI (see details in method section) established and strengthened the content validity of the current scale. A continuous iteration resulted a scale comprising of 16 context-based situations and 3-5 associated response items. According to the experts, resulted scale showed good content validity. This indicates that manager's integrity-SJT contains relevant situations and stems implicating constructs of interest and it can be used to assess manager's integrity towards their subordinates.

Contribution of Authors

Amna Rafique: Conceptualization, Investigation, Data Curation, Formal Analysis, Writing – Original Draft

Saima Ghazal: Conceptualization, Methodology, Formal Analysis, Writing-Review & Editing, Supervision

Conflict of Interest

There is no conflict of interest declared by authors.

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