

# **Perceptions on Influence Tactics among Leaders in the Ministry of Education Malaysia: An Application of The Many Facets Rasch Model (MFRM)<sup>1</sup>**

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## **Abstract**

Research about leaders in Malaysian public sectors remains largely underexplored. The leaders at the Ministry of Education, Malaysia (MOEM) are come from PTD (administration) and DG (education) officer scheme. This study investigates of influence tactics of the 18 leaders at MOEM as perceived by their subordinates using survey data from 56 respondents of six divisions MOEM. The instrument, Influence Tactics Behaviour (IBQ), were administered in order to get data for this study. Using many facets Rasch model (a multi-rater analysis), three leaders in each division were assessed by 10 subordinates (act as raters). The findings show certain construct such as rational persuasion and inspirational appeal are the most common tactic used by the leaders, meanwhile construct exchange, pressure and personal appeals are seldom used by the leaders as perceived by subordinates. In terms of influence tactics behaviour the subordinates seen there are one PTD (administration) officers and two DG (education) officers are slightly better at demonstrating IBQ.

## **Keywords**

Malaysian public sector, public administration, multi-rater assessment, many-facets Rasch model

## **Introduction**

Public sector in developing countries such as in Malaysia (Sidiquee, 2006) and Indonesia (Aspinall, 2013; Lewis, 2017) is seen has intrinsic capacity in terms of providing not a good quality service. Problems like red-tape, not flexible, not transparent and poor performance are complaint that mostly mentioned by many parties. The challenge to public sector will be more crucial in recent times where globalization and information technology really shaped the world that makes jargon such as new public management and good governance is popular. One way to amend this situation is to appoint a leader in public sector organization that can manage civil servants effectively and efficiently. A good quality of leaders are in high demand and preparing for those leaders to make administrative reforms run smoothly is the real challenge for many developing countries like Malaysia.

The current direction of Malaysia's educational policy has been predominance by the efforts and initiatives outlined in the economic and social development policy already stated in early 1990's called as the Vision 2020 (Ibrahim, 1996). In October 2011, the Ministry of Education Malaysia (MOEM) presented the comprehensive review of the education system in Malaysia. In the effort to secure the well-being of Malaysians, the MOEM strives to identify the gap and challenges related to education system and search for means and solutions to address them. The cumulative feedback from various stakeholders (general

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public, education organizations and experts from UNESCO, World Bank, OECD and six local universities) has resulted in a blueprint which presented the educational policies and strategy within the context of the National Education Philosophy. In 2013, the Malaysian Education Blueprint (MEB) 2013-2025, was officially launched in Putrajaya (administrative capital of Malaysia). Simultaneously, all transformation efforts could be seen in all government ministries and agencies which include the MOEM which has been entrusted to lead the educational transformation agenda as stipulated in the MEB. In essence, the initiatives have been translated into eleven (11) shifts, where the shifts plan for the progress of the Malaysian education system (Ministry of Education, 2012).

In this study, shift eight (which is 'transform ministry capabilities and capacity') is particularly very much pertinent to this paper. In the educational public sector like MOEM, more recent changes in educational policies requires new breed of leaders who could lead and sustain the organisation through times of change. With the introduction of MEB and the Government Transformation Plan (GTP 2.0) leaders were expected to translate the new initiatives into meaningful, cost-effective programmes in improving the quality of education in Malaysian schools in general. This study investigates about MOEM leaders' ability regard to their influence tactics based on their sub-ordinate assessment. The next section will explain about literature review in the context of Malaysian education ministry and leadership and influence tactics issue. Then, follow by explanation of methodology, findings and discussion of the study that apply multi rater analysis, and close with conclusion section.

## **Literature Review**

### ***MOEM Organisation***

In 1955 the Ministry of Education Malaysia (MOEM) was formed and since then it has been entrusted to ensure that almost all matters pertaining to education system in Malaysia is dealt with responsibly. The role of education is seen as important in the effort to foster the spirit of national integration and unity in Malaysia. The MOEM is described as always having been responsive to the needs of the nation as a whole (Ministry of Education, 2012).

To date, the organisation structure of the ministry consists of 37 divisions. As of 13 July 2017, the total number employees in the MOEM was recorded at 551,693 personnel working actively in the ministry, majority are teachers. The establishment of the MOEM is distinctive as it is unique (Norwawi, 2010). There are two main schemes of officers working side by side in the ministry. The two (2) main schemes of officers in the MOEM are the Educational Officers Scheme (called with DG: *Skim Pegawai Perkhidmatan Pendidikan Siswazah/Bukan Siswazah*) and Administrative and Diplomatic Officers Scheme (called with PTD: *Skim Pegawai Tadbir dan Diplomatik*) (Pekeliling Perkhidmatan Bilangan 40 Tahun 2013). DG officer means their background of education and qualification is as teachers; meanwhile PTD officers handle of human resources and finance affairs in the MOEM. Thus, this research was be carried out to understand how these two schemes lead and work together in the same environment.

### ***Leadership***

Leadership is considered to be an important factor influencing the performance of organisations and their members (Yulk, 2004). One definition of leadership is "the process of influencing the activities of an organized group toward goal achievement" (Rauch & Behling, 1984, p.46). Regardless of their respective organisation's size or structure, most leaders would go all out to maximize the performance of their subordinates so that the

organisational goals can be achieved (McColl-Kennedy & Anderson, 2002). In gist, effective leadership matters to ensure the performance of an organisation.

Several authors and researchers are of the opinion that all leadership in any organisation share common assumption that all leaders of small and large entities extol the same virtues of understanding that leaders hold the key to organisational effectiveness (Bryman, 1986). Hence, it supports the notion that the fundamental concept in leadership still revolves around the underlying process of influence (Yulk, 2004). In recent times, high performing organisation aspires to retain leaders whom are transformational (Bass, 1999). This is desired through collaboration and consultation, making necessary changes in the structure processes and practices, and the ability of the leader to communicate the organisations' missions and visions (Bass, 1991).

### ***Influence Tactics***

Definition of influence refers to the assumption that it involves a social influence process whereby intentional practice influence is exerted by one person [or group] over other people [or groups] to structure the activities and relationships in a group or organisation. In addition, this conception gives the impression:

“that most of the variation on leadership concepts, types or models can be accounted for by differences in who exerts influence, types or models can be accounted for by differences in who exerts the influence the nature of that influence and the purpose for the exercise of influence and its outcomes” (Yulk, 1994, p.3).

It was concluded that in most part of the conceptions of leadership, influence is most crucial. The influence tactics behaviour has been tested and was evidently reliable and valid (Yulk, 2008). There are four types of proactive influence tactics. Firstly, rational persuasion which means, the agent applied logical arguments and factual evidence to explain a proposal or request is manageable for attaining important task objectives. Secondly, inspirational appeals is referred to as the agent demonstrated an appeal to values and ideals by being sensitive to the target person's emotions to garner commitment for request or proposal. Thirdly, consultation is defined as the agent motivates the target to contribute ideas for improvements and make the target be part of the program. Finally, collaboration refers to the effort of the leader to help the target in completing the task (Yulk, 2004).

Despite the popularity of the transformational leadership style theory, Yulk (1999) argues that the models omit important behaviours known to be linked with effective leadership such as influence behaviours (Yulk, 1999). The influence behaviours is defined as the ways in which a request is put forward. In addition, influence is defined as an interactive process in as much as it impacts on the outcomes of the request (Yulk, 2002). The target request may accepted by three ways. Firstly, they would be committed, secondly, compliant or resistant. When the target internally agrees with the request and is enthusiastic about it, then the target is committed. A compliant target will carry out the request, but with much reluctance. Lastly, resistance is refers to the target avoiding to carry out the request (Charbonneau, 2004).

There are several ways of predicting the outcomes of using influence tactics. One of the ways is proposed by Yulk and Tracey (1992). Using field questionnaire, the relative effectiveness of the proactive influence tactics has been examined (Yulk & Tracey, 1992). Three studies using survey questionnaires or descriptions of influence incidents that supported most of the hypotheses were mentioned in three studies (Yulk & Falbe, 1990). A

more recent study on influence tactics and the perceptions on transformational leadership were conducted using military sample (Charbonneau, 2004).

## Method

### *The IBQ Instrument*

The instrument that was used in this study was divided into two sections. Section A is the questionnaire on the demographic of the respondent, for example, age, gender, qualification and work experience. In Section B, the questionnaire was administered to assess the influence tactics that consist of 44 items. The Influence Behaviour Questionnaire (IBQ) is developed by Gary Yulk (2013) and designed to fill the gap that was the omission of influence behavior in other leadership instruments. The IBQ instrument is used to measuring influence tactics which show the ability of leaders to practice their leadership skills. There are eleven influence tactic constructs as shown in Table 1 were selected in this study. The researchers got permission to use the instrument from Gary Yulk.

Table 1. Constructs and definition of influence tactics instrument (IBQ)

No	Behavior construct	Definition	Item No.
1.	Rational Persuasion	The agent uses logical arguments and facts evidence to show that a request or proposal is feasible and relevant for important task objectives.	1-4
2.	Consultation	The agent asks the target person to suggest improvements or help plan a proposed activity or change for which the target person's support is desired.	5-8
3.	Inspirational appeals	The agent appeals to the target values and ideals or seeks to arouse the target person's emotions to gain commitment for a request of proposal.	9-12
4.	Collaboration	The agent offers to provide assistance or necessary resources if the target will carry out a request or approve a proposed change.	13-16
5.	Apprising	The agent explains how carrying out a request or supporting a proposal will benefit the target personally or help to advance the target's career.	17-20
6.	Ingratiation	The agent uses praise and flattery before or during an attempt to influence the target person to carry out a request or support a proposal.	21-24
7.	Personal appeals	The agent asks the target to carry out a request or support a proposal out of friendship, or asks for a personal favour before saying what it is.	25-28
8.	Exchange	The agent offers something the target person wants, or offers or offer to reciprocate at a later time, if the target will do what the agent requests.	29-32
9.	Legitimizing tactics	The agent seeks to establish the legitimacy of a request or to verify that he/she has the authority to make it.	33-36
10.	Pressure	The agent uses demands, threats, frequent checking, or persistent reminders to influence the target to do something.	37-40
11.	Coalition	The agent enlists the aid of others, or uses the support of others, as a way to influence the target to do something.	41-44

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All items are assessed by respondents using a five-point rating scale, which are: 1) *I can't remember him/her ever using this tactic with me*; 2) *He/she very seldom uses this tactic with me*; 3) *He/she occasionally uses this tactic with me*; 4) *He/she uses this tactic moderately often with me*; and 5) *He/she uses this tactic very often with me*.

**Participants**

The population of this study consisted of subordinate (civil servants) who are currently working in in the six divisions selected in the MOEM either as DG or PTD officers scheme. The sample is chosen to match the purpose of this study. The respondents are randomly selected and come from six divisions out of the 37 divisions in the MOEM. From each division, 10 government employee of MOEM were selected to participate in the study. The expectation was to get 60 respondents from six divisions of MOEM, however four respondents not returned the questionnaire. So, in total 56 respondents participated in this study (Table 2).

The prerequisite condition of these respondents is that the subordinate (civil servants of MOEM) must know which leader to assess and have had a working relationship with the appointed leader. This study is applying multi rater analysis where subordinates in the same division become raters, who assess their leaders' (or ratees) influence tactics behavior using IBQ instrument.

Table 2. Demographic profile of Respondents (N=56)

<i>Demographic</i>		<i>Frequency</i>	<i>Percentage %</i>
<i>Gender</i>	<i>Male</i>	18	32.1
	<i>Female</i>	38	67.9
<i>Age (years)</i>	26-30	2	3.6
	31-35	11	19.6
	36-40	15	26.8
	> 40	28	50
<i>Scheme</i>	<i>DG</i>	35	62.5
	<i>PTD</i>	21	37.5
<i>Qualification</i>	<i>Diploma</i>	3	5.4
	<i>Degree</i>	21	37.5
	<i>Master</i>	30	53.6
	<i>PhD</i>	2	3.6

**Procedure**

There were three leaders in each division that have to be assessed by their subordinates (respondents in this study). There are one head of division, one head of sector and one head of unit in one particular division of MOEM were chosen to be examined their influence behavior ability by their 10 subordinates. Each respondent was given three hard-copies of IBQ instrument. The instrument to be rated for each three leaders assessed were clearly labeled. The respondents need to complete to assess one leader in a day and returned the filled questionnaire. Roughly in a week all respondents completed assessed their three leaders in their own division and submitted to the researchers.

The raw data was keyed in manually into Microsoft Excel spread sheet. In total, there were 56 respondents who assessed 18 leaders in six divisions. Total number of data expected for

IBQ questionnaire are 56 respondents x 3 leaders x 44 items = 7392 data. There are some missing data, where respondent did not fill in some items in the questionnaire, the real data collected are 7171 data (meaning there were 221 missing data). This study using Rasch model measurement approach, where missing data is not a problem where the model itself can generate data based on probability measure, and especially missing data in this study is not big, which only 2.9%.

**Data analysis**

The Many-facets Rasch Model (MFRM) was developed by Linacre (1989) to adjust for the variability that is introduced in ratings through the use of multiple raters. The MFRM is used in this study in order to provide fair and an accurate estimation of the MOEM leaders’ (ratees) influence tactics behavior based on their sub-ordinates (raters) assessment. A further advantage of the MFRM is that each judge can be modelled according to the manner in which that rater uses the rating scale; this defines its own scale for the raters, which means the model does not expect the raters to rate identically (Englehard, 2013; Boone, Staver & Yale, 2014; Bond & Fox, 2015). The MFRM has been used in many studies for handling rater-related variability and inconsistencies in many fields (Abu Kasim, 2011; Parra-Lopez & Oreja-Rodriguez, 2014; Wang & Stahl, 2012; Basturk, 2008).

The simple general form of MFRM can be formulated as follows (Linacre, 1989):

$$\log \left[ \frac{P_{nij\bar{k}}}{P_{nij\bar{k-1}}} \right] = B_n - D_i - C_j - F_k$$

Where:

$P_{nij\bar{k}}$  is the probability of examinee  $n$  being awarded on item  $i$  by judge  $j$  a rating of  $k$

$P_{nij\bar{k-1}}$  is the probability of examinee  $n$  being awarded on item  $i$  by judge  $j$  a rating of  $k-1$

$B_n$  is the ability of examinee  $n$

$D_i$  is the difficulty of item  $i$

$C_j$  is the severity of judge  $j$

$F_k$  is the extra difficulty overcome in being observed at the level of category  $k$ , relative to category  $k-1$

There are three facets involved in this study, which are MOEM leaders (ratees), their subordinates (raters) and IBQ’s items. The MFRM can measure the interaction between these facets: this may signal unexpected responses or bias in the rating process. Further, the model “is able to detect other rater effects, such as restriction of range, halo effect and internal consistency through the use of particular fit statistics” (Abu Kasim, 2011). The raw data from MS Excel then transfer into coding program specifically made for this study for multi-rater analysis. The study used FACETS version 3.71.3, developed by Winsteps.com (Linacre, 2013), a computer software program that implements MFRM.

**Result and Discussion**

***IBQ Reliability***

Table 3 shows reliability of using 44 IBQ items by 56 raters to assess 18 of MOEM leaders in this study. It shows that reliability index for IBQ is 0.99 which is very good where the item separation also higher (more than 3) (Fisher, 2007). The separation and reliability indices of ratees (leaders) and raters (subordinates) also show that the data gathered is reliable.

Tabel 3. Reliability Report of IBQ

	Mean (SD)	Separation	Reliability
<i>Ratee (leader)</i>	0.00 (0.22)	5.07	0.94
<i>Rater (subordinate)</i>	0.04 (1.20)	4.47	0.95
<i>Item</i>	0.00 (0.80)	9.45	0.99

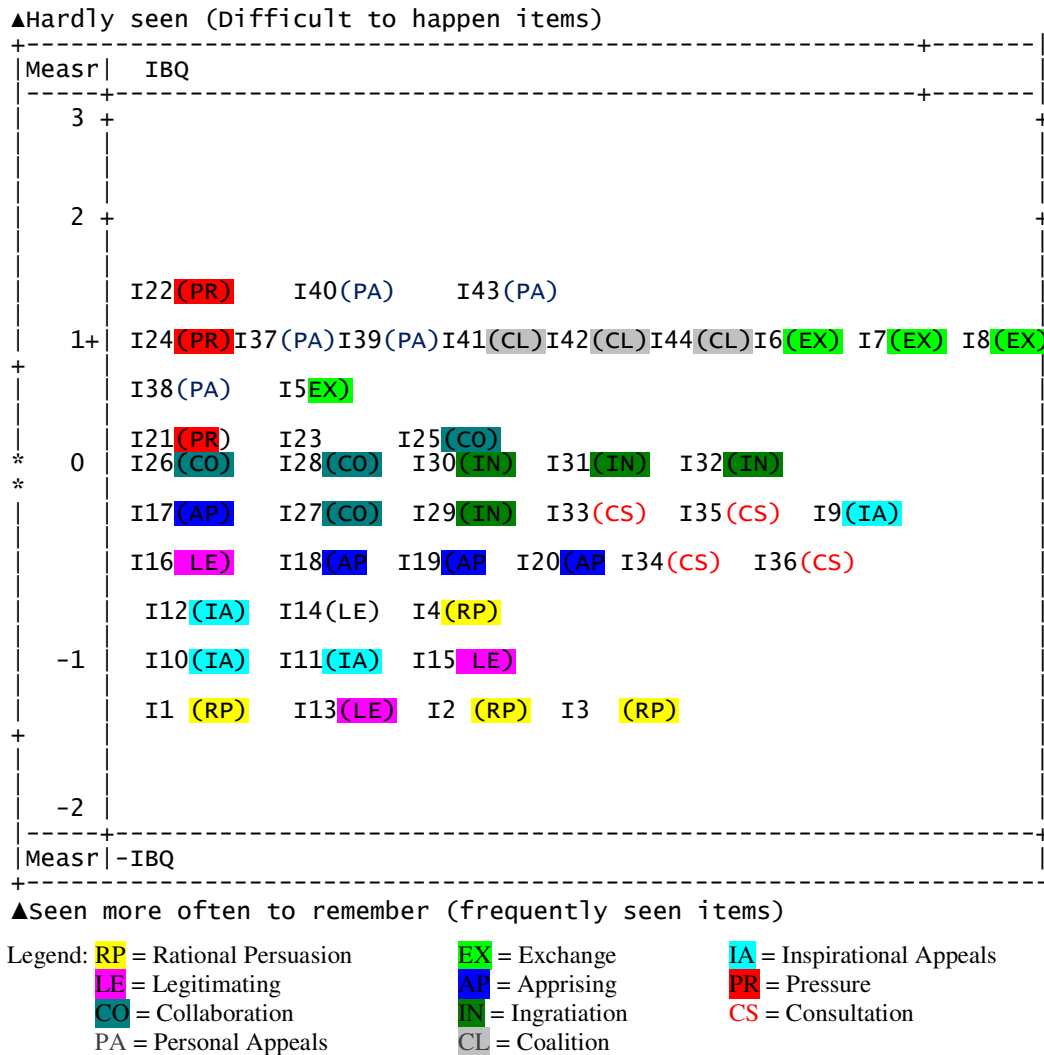
***IBQ Item Difficulty***

Figure 2 below shows the quality logit measures of all IBQ items, which informs about their item difficulty. The positioning of the items on the scale is to categorize which item is deemed difficult, moderate or easy as perceived by the subordinate when assessing their leaders. The subordinate relies heavily on the statement rubric given and they assign number using the rating scale provided. The ‘cut off’ point in this map are value of mean (0.00) and standard deviation (0.80) of item logit (see Table 3). The IBQ items consider is difficult to be happened in MOEM leaders as perceived by their subordinate, if the item logit is above upper-SD (more than 0.80 logit); it is consider moderate if logit value between 0.80 to -0.80 logit (meaning: the leader occasionally uses this tactic as perceived by subordinate); and if the logit item below -0.80 logit, the subordinate perceived their leaders seen more often about the particular tactics (Figure 1).

Figure 1. Mean and Standard Deviation of IBQ Items Difficulties

0,8	(13 items)	(30%)	Difficult Items
0,0	(22 items)	(50%)	Moderate Items
-0,8	(9 items)	(20%)	Easy Items

Figure 2. Variable Map of IBQ: Item Difficulty Report



In the Figure 2 shows that the most difficult item, meaning item that the subordinates perceived that their leaders “can’t remember him/her ever using this tactic” to them is item number 22 (I22) where its statement is ‘Uses threats or warning.’ Another two items in this Pressure construct also something that not using by the leader (I24 = ‘Tries to pressure you to carry out a request’ and I21 = ‘Demands that you carry out a request’). This is a good sign that MOEM leader seldom or never use pressure when dealing with subordinate.

It is interesting to note that personal appeal (construct PA) also categories as difficult item, meaning that the MOEM leader never use his position for their benefit. Item I40 (‘Asks for your help as a personal favor’) and I43 (‘Brings someone along for support when meeting with you to make a request or proposal’) for instance also a good indication of good governance practice in the public sector.

One construct where subordinate perceived done occasionally by the MOEM leaders is collaboration. All items in this construct categories as moderate item, such as I26 (‘Offers to provide resources you would need to do a task for him/her’) and I28 (‘Offers to help with a



*task that he/she wants you to carry out*'). According to Yulk (2004) collaboration is the effective influence tactic to generate target's commitment to a request, where the leaders place at disposal to assist the target in performing the request. In other word, the task becomes a team effort. So, this finding informed that this particular thing needs to be emphasized in leadership training in MOEM.

Group of items that subordinate seen the tactics used often, if not always, by the leaders is in rational persuasion (RP) construct. Rational persuasion is widely used and is effective in getting target's commitment to perform a task (Yulk et al, 1996), which happened mostly based on subordinate perception. Item I1 (*'Uses facts and logic to make a persuasive case for a request or proposal'*), I2 (*'Explains clearly, why a request or proposed change is necessary to attain a task objective'*) and I3 (*'Explains why a proposed project or change would be practical and cost effective'*) clearly show that the MOEMs leader use rational argumentation when conducting their task with subordinates.

Table 4. Influence Tactics Behaviour (IBQ) Item Difficulty categorize

	<b>Constructs</b>	<b>Difficult</b>	<b>Moderate</b>	<b>Easy</b>
1	Rational Persuasion			I1, I2, I3, I4
2	Exchange	I4, I5, I6, I7		
3	Inspirational Appeal		I9	I10, I11, I12
4	Legitimizing	I13, I14, I15	I16	
5	Apprising		I17, I19	I18, I20
6	Pressure	I21, I22, I23, I24		
7	Collaboration		I25, I26, I27, I28	
8	Ingratiation		I29, I30, I31, I32	
9	Consultation		I33, I34, I35, I36	
10	Personal Appeals	I37, I38, I39, I40		
11	Coalition		I41, I42, I43, I44	

Table 4 gives a comprehensive summary of item difficulty for each construct. This finding provides important information regard to training need for instance. Three construct that regard to work as a team, which are collaboration, consultation and coalition (no 7, 9 and 11 in Table 4 above), is something that need to be emphasized in MOEM leaders training, which subordinates perceived it as moderate tactic used by the leader. Ideally, ingratiation construct (no 8) is better classify as difficult item (never happened), but subordinates' perception see that items in this construct moderately use tactic by the leaders.

In terms of legitimating construct, only item I16 (*'Says that a request or proposal is consistent with prior precedent and established practice'*) that leader perceived moderately use tactic by the leaders. Other three items (I13, I14 and I15) were rarely practiced which indicating bureaucratic procedure need to be strengthened.

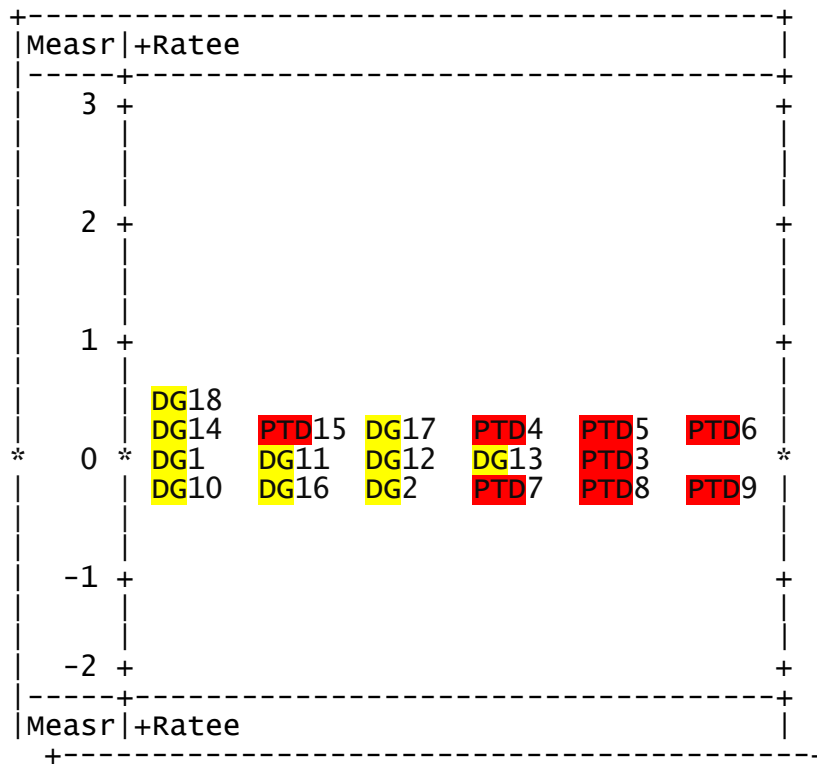
Overall, item difficulty report as shown in Table 4 is a positive outlook of MOEM leaders as perceived by their subordinates. Something related to personal benefit is avoided (construct exchange and personal appeals), rarely use pressure to subordinates; at the same time MOEM leaders tend to rely on rational persuasion and inspirational appeal to get along with their subordinate in formal duty.

**Leaders Tactic Ability**

According to Figure 3, there are 10 DG officers and 8 PTD officers from six divisions participated in the study that assessed by 56 subordinates. In general, as shown in the figure below, the leaders influence tactic ability are not having a very wide gap. Mean of the leaders' tactic ability is 0.00 logit and its standard deviation is 0.22 logit indicating all leaders mostly in the middle category. There are three leaders, which are DG18, DG14 and PTD15, can categorize as better performance in the tactics compare to others (their logit more than 0.22 logit).

Based on logit mean and standard deviation, there are four leader that consider slightly low performance (less than -0.22 logit), which are DG10, DG2, PTD8 and PTD9. In between there are 11 leaders (61%) that consider have moderate performance in influence tactic behavior based on their subordinates assessment.

Figure 3. Variable Map of IBQ: Leaders (Ratees) Report



Legend: DG = Education Officers Scheme  
PTD = Administrative and Diplomatic Officers Scheme

Descriptively there are no wide variance in terms influence tactic behavior between DG and PTD office scheme in the MOEM. Both schemes have leaders in three categories ability: low, moderate and high performance. This mean in this study, sample of leaders with different background relatively has similar influence tactics behavior ability.

## Conclusions

Influence tactic behavior is an important leaders' ability that will strengthened effective leadership. In this study MFRM has shown that there some influence tactics behavior that use often by MOEM leaders such as rational persuasion and inspirational appeal which could be typical ways of doing thing in Malaysian public sector relation between leader and subordinate. Another positive sign in Malaysian bureaucracy that found in this study, the leader rarely use pressure and personal appeals to subordinate between dealing with formal job in their office. One indication that needs to be strengthened in MOEM leaders training is regard to collaboration, consultation and coalition where work as team need to find way or strategy to make this often happened. In terms of influence tactics behavior in the MOEM, MFRM analysis found that descriptively there is not much variation in their ability, even from officer which has different background (DG and PTD scheme). The leaders ability based on subordinates ability are in the middle category.

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