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Leadership role models for young professionals –Case study from Finnish university students

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Abstract. Leadership is a concept that is proven very hard to define unambiguously. Despite of this scientific gap, practical questions still are set towards leadership. Concept of leadership is widely used in other research and it is one of the most interesting research issues in organizations. Good leadership is like good quality; we can recognize it when we experience it, but it is quite hard to define where this feeling of good or bad quality came from. Data was gathered in 2015-2017 from students in Turku University of Applied Sciences. Students analyzed their former leaders with open answers. We employed a mix method design with both quantitative and qualitative analysis. For quantitative analysis, we employed automated content analysis based on Natural Language Processing (NLP) techniques. Results show that autocratic leadership is connected to negative picture of leader with in millennials Future research aspects and recommendations are issued in this paper.

Keywords: leadership · organizational behavior · role · management style · Natural language processing

1 Introduction

There are a many different approaches introduced towards leadership and leadership styles. The scientific leadership research history's beginning can be situated in era of management boom after Second World War, but it has been interest of humankind since the beginning of recorded history.[1] Alternatively, as Bass[2] states: "*Leadership is one the world's oldest preoccupations*". During the decades, different definitions for leadership is made over and over again and it is stated that "*there are almost as many definitions of leadership as there are persons who have attempted to define the concept*"[3]. Idea for wideness and the range of leadership field can be seen from e.g. review research executed by Dinh et al. [4] where they identified 66 different leadership theory domains. Naturally, it would be unfeasible to try to use all of these domains all the time or any time. Reunanen & Kaitonen [5] presented leadership styles' ontology where different approaches were combined to one holistic model and their similarities were compared as an ontology. Authors' (ibid) leadership style ontology is illustrated in figure 1.

	Kurt Lewin	Likert	Blake, Mouton & Reddin	Situational	LMX	Transformational	Multiple Linkage Model	Team leadership	Substitute for leadership	Goleman
Level of freedom	High	High	High	High	High	High	High	High	High	High
Level of followers' capability	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
Orientation in task	Low	Low	Low	Low	Low	Low	Low	Low	Low	Low
Orientation in human	High	High	High	High	High	High	High	High	High	High
Work complexity	High	High	High	High	High	High	High	High	High	High
	Authoritarian (autocratic)	Exploitive Authoritative	Task Concern	Directing (telling)	Stranger		Task-Orientated	Some Relational high Task actions	No need for leadership	Commanding
		Benevolent Authoritative	High Task Some Human Concern	Coaching (selling)		Idealized influence and Inspiration	Relations-Oriented	Task and Relational Actions		Affiliative Visionary
	Democratic	Consultative	Some Task High Human Concern	Supporting (participating)	Acquaintance		Change-Oriented	Some Task high Relational Actions	Need for leadership	Democratic
		Participative	Human Concern	Delegating (observing)	Mature partnership	Intellectual Stimulation and Individualized Consideration	External-Oriented	Environmental Actions		Pacesetter Coaching
	Laissez-Faire								No need for leadership	

Fig. 1. Leadership styles ontology [5]

The ontology illustrated in figure 1 consists behavioral approaches [6][7][8][9] later broadened by Yukl [10][11] as well as latter additions by managerial grid thinking [12][13] in behavioral approaches' latter era. Since behavior theoretical models were found to be too simple to explain the completely complex concept of leadership, more integrative models were developed. [10][14] Hence, situational leadership approaches [15][16][17] are integrated to model strengthened by situational interaction based theories [18][19], recognizing that [19][20] provided interesting add from leaders' influence in followers' satisfaction motivation and performance. Social interaction models are also handled from teams pursue to best solution together [21] and to the followers' different positions in leaders mind as LMX theory sets them to in-group or out-group [14][22]. LMX theory can be seen as one bridge between interaction and integrative leadership approaches. One of integrative approaches is transformational leadership [23][24], which essence is to make leaders able to inspire followers to "produce far beyond what is expected of them", and changes act as change agents by themselves. The multiple-linkage-model is Yukl's [11] answer to the need for more integrative approach.

Both, transformational and multiple linkage approaches are quite heavily prone to development and positive change, some adding should be done regarding learning. Amy [25] found that emotionally intelligent communication was one of the most prominent feature when facilitating learning in organizations, but authoritarian, defensive and non-communicative behaviors were not (positively) effective. Other well-known approaches include, matching people rightly to jobs, setting goals, but allowing enough freedom, support and encouragement from leaders, information sharing and openness

[26]. One very characteristic integrative model is LAMPE approach and it consists former main issues enhanced by 29 leadership practices [27] , but doesn't provide new style for the list. Team leadership model [14][28][29] is also included.

Substitutes for leadership [30] is an approach, which is also interesting, even that it is not directly a leadership approach. Approach has similarities to autocratic and laissez-faire styles. Authors (ibid) suggest that there are a number of characteristics, which may neutralize the need for leadership. Simplified, but very clear situations are that when follower has strong ability, and experience, need for independence or rewards are indifferent to him/her or follower's tasks are routine and clear or task provides intrinsic satisfaction or the organization is very inflexible or work groups are very cohesive. In these cases, there might be no need for task or relation leadership just e.g. standard operation procedures or good bonding and commitment from individuals towards work and organization (ibid). Emotional intelligence [31][32] is one perspective in model, even that it is not exactly highlighted as a leadership approach.

Five common variables was found in model. Level of freedom for followers, how much they have freedom to make decisions by themselves i.e. framework for followers' decision making. (cf. Reunanen, Maijala [33]) Level of followers' capability, how capable followers are or how capable their leader thinks that they are. Which kind of orientation is kept by leader, or is needed to be kept, orientation to task or orientation to human. Complexity of the work is one common variable in ontology.

2 Research setting

2.1 Research data

First phase in this research was to gather information regarding experiences of leaders. This was done by task, which was appointed, to respondents. Their task was to analyze their experiences from work places, or if work experience was lacking, from hobbies or similar, where they had been led by leader. Respondents got short introduction lesson towards four distinctive leadership roles and how these roles might be recognized. After introduction class respondents got task that, they should analyze three different leader and leaders' styles from their past and place them under one of certain stereotypical role. These roles are more opened in next chapter. Respondents' task was to describe and analyze leaders with their own words and reason why they'd situate certain leader to certain stereotypical role according their leadership styles.

In this research leadership approaches/styles was chosen to handle as roles. For the sake of clarity, number of roles was diminished to four distinctively different ones: 1) "Like the others", 2) "Autocratic leader", 3) "Servant leader" and 4) "Leader who has in and out role in team". Like the others leader was chosen to represent archetype of leader who possesses the official management status but not charismatic leadership status. There could be several reasons for this kind of style, e.g. person is not aware what leadership status means, person is unaware what are the responsibilities for management position or somebody in the team is not giving the charismatic leadership status for the person, to name a few. Autocratic leader is the leader whose style is very autocratic and who keeps long power distance to followers and utilizes "army style" leadership i.e. commanding, directive style. Servant leader is leader who puts the followers'

needs first and helping them to reach goals. [34] Servant leader builds an environment that serves the needs of the followers and enables them grow and develop, and encourages them to take new responsibilities. [11][35] In introduction lesson servant leader was described as “mother hen” as its positive meaning. Leader who has role in and out of team is leader who has his/hers distinctive role as leader in the team/unit, but who is also considered as part of the team. Leader with in and out role possesses both, official management status and charismatic leader status and person recognizes that leader is organization’s representative in team.

The survey was executed among first and second year students from Turku University of Applied Sciences, Finland at 2015-2017. Students were from Industrial management and engineering degree program and Professional sales degree program. Respondents’ age ranged between 19-25 and gender ratios was 38.6% females and 61.4% males. All together 163 students answered the survey and each completed three cases. Because of some misunderstandings, answers from 13 students was rejected from the study. Typically, in rejected cases, students were placing leaders to some classical styles such as Hersey and Blanchard or Blake and Mouton and were since incomparable with others. From these 150 students, who executed the task how it was meant, 450 cases were collected. From these cases, only autocratic leaders, 158 cases total, was selected to this research.

2.2 Research questions

Main question was to find out whether there could be evidence found towards proposition that followers think that autocratic leadership is considered to be negative leadership style. When scrutinizing leadership styles’ ontology autocratic leadership is situated to be suitable only for people who are not used to be free or democratic in simple works with not very capable followers where tasks are more important than humans are. Therefore, hypothesis one was set as follows

H1. An autocrat leader is considered negatively in the eyes of followers.

This main research question was then analyzed via different negative aspects. Negativity of the autocrat leader implies that totality is clearly manifested, as in following hypotheses H2a-H2c.

H2a. The negative aspect of the autocrat leader positively affect Never (group of words implying ‘never’)

H2b. The negative aspect of the autocrat leader positively affect Everything (group of words implying ‘everything’)

H2c. The negative aspect of the autocrat leader positively affect Nobody (group of words implying ‘nobody’)

Feedback is and communication is often regarded as a positive aspect in leadership. Therefore, hypothesis H3 and H4 was conducted in to research questions.

H3. Leading the organization requires giving feedback

H4. Giving feedback affects a positive view from the subordinates.

2.3 Model validation and text analysis

Structural Equation Modeling (SEM) was applied to test the model's goodness-of-fit [36][37][38]. Model fit was estimated using CFI, TLI, RMSEA, NFI, and minimum discrepancy divided by their degrees of freedom (CMIN / DF). Values of CFI and TLI close to .95 or higher are indication of good fit [39], the ratio CMIN / DF should be typically lower than 3. RMSEA should be .06 or smaller [40].

We employed a mix method design, a combination of strength, integrating qualitative and empirical analysis, and providing a better understanding of the research problem [41].

The organizations' top management continuously seeks to improve and optimize performance [42][43]. Along with ongoing changes in the organization, its language changes, reflecting its changing characteristics. A thesaurus or semantic network reflects the language of the organization [44], however since language changes every day – thesauri require continuous investigation (Ibid).

We follow Eckhaus's [45][46] methodology, employing a combination of N-gram and Bag of Words (Bow) techniques, for the analysis of leadership characteristics.

We employed TEXTIMUS, a text mining and analysis software [47]. First, n-gram frequencies were generated. N-gram refers to a contiguous sequence of n words from a given sequence of text [48]. N-gram is often used in sentiment analysis of texts [49].

Next, we made use of the BoW technique [50] [51][52]. BoW is known as the most common method for the translation of text representation to numerical representation [53]. According to BoW, documents are represented as a collection of words, regardless of order. A group of keywords is then explored in the set of documents and assigned values according to the frequency of its appearance. We therefore computed the frequency of all the words, and grouped words with the highest frequency employed for the research variables.

Similarly to other studies that employed BoW in leadership and top management content [54][55][56][57][58], the frequencies of each group were summed to the research variables, as follows. Leading – keywords that regard leading in the organization. Feedback- keywords implying giving feedback. Negative words. Positive words. Three groups of words that can be related to 'totality' characteristics: Never – words regarding the totality of 'at no time', Everything - words regarding the totality of everything and everybody, similarly for the group of words Nobody.

3 Results

The correlations, means, and standard deviation values between the research variables are presented in Table 1.

Table 1. Correlation matrix, means, and SD

	<i>Leading</i>	<i>Feed- back</i>	<i>Negative</i>	<i>Posi- tive</i>	<i>Never</i>	<i>Every- thing</i>	<i>No- body</i>
<i>Leading</i>	-						
<i>Feedback</i>	.21**	-					
<i>Negative</i>	.02*	.17*	-				
<i>Positive</i>	.07	.24**	.24**	-			
<i>Never</i>	.05	.07	.18*	-.01	-		
<i>Everything</i>	.30***	.02	.37***	.11	.08	-	
<i>Nobody</i>	.08	.11	.39***	.04	.16	.17*	-
Mean	.77	2.39	12.16	2.73	.53	1.08	.75
SD	1.96	3.51	9.07	2.73	.98	1.29	1.0

* $p < .05$, ** $p < .01$, *** $p < .001$

Figure 2 illustrates the model and results. The hypothesized model showed a very good fit: CMIN/DF = 0.59 ($p > .05$), CFI = 1, TLI=1.21, RMSEA = 0, NFI = 0.05. All hypotheses were supported. Leading positively affects Negative (H1).

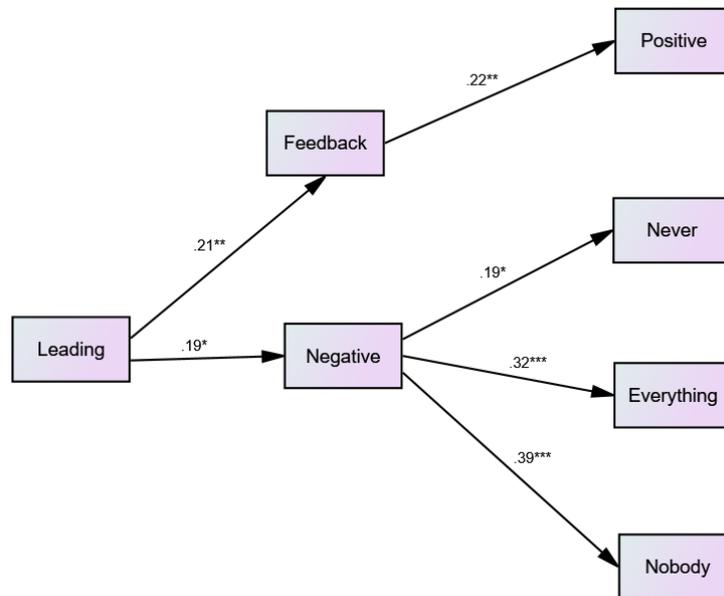


Fig. 2. Model results. * $p < .05$. ** $p < .01$. *** $p < .001$

The hypothesized model showed a good fit: CMIN/DF = 0.65 ($p > .05$), CFI = 1, TLI=1.09, RMSEA = 0. All hypotheses were supported. Negative positively affect Never (H2a). Negative positively affect Everything (H2b). Negative positively affects Nobody (H2c). Leading positively affects Feedback (H3). Feedback positively affects Positive (H4).

Next, we added Gender as a controlled variable, in order to examine if any differences occur. The results still show a very good fit, CMIN/DF = 0.61 ($p > .05$), CFI = 1, TLI=1.13, RMSEA = 0. All the relationships in from the previous model remain significant, however, Gender did not have any statistically significant relationship.

4 Discussion and further research

When looking the variety of different leadership approaches and theories it is quite clear that autocratic leadership style is recognized in majority of them. The question lies in the situation whether the autocratic leadership model is suitable or effective. As figured out in Reunanen & Kantonen [5] leadership styles ontology, it seems that work which is not demanding very capable followers, is task not human oriented and relatively simple this leadership style may become in the question. Results of this study are strengthening the picture that autocratic leadership is regarded to be negative and it is connected to negative words and words which are expressing totalities. This is quite understandable since autocratic leadership totalitarian approach from its nature, no or very limited freedom allowed. Feedback on the other hand was considered positive matter and it was connected clearly to the positive side of leadership.

There are significant limitations found in this research. Sample group is not representing the working life as and all workers even when the gender ratio was quite equal. Sample group consisted only young people born after between 1990 and 1998 i.e. they were representing generation y or millennials. Respondents represented university students in degree programs in which is quite hard to get in. Last, but not least, cultural homogeneity. Respondents were only from Finland, Nordic, rich, free and democratic country with long history of equal treatment between all people. What would have been the results if the respondents would have been twenty years older (differences between generation x and y), with very low education, from different, let's say, more masculine and power prone and not as free and equal culture.

On the other hand, this research draws a good picture that professional driven Nordic millennials are not thinking highly about autocratic leadership style. This is well parallel to former millennials researches. Martin [59] concluded that millennials interrogate. They want to know all about, what the organization demands from them, what are the career opportunities and rewards. They also demand immediate feedback. (ibid). Characteristic for millennials is that they want to take responsibility and prove themselves. They also prefer respect rather than money and have strong feeling for success. [59][60][61][62][63] They have crave towards occupation's meaning about the meaning. They can do work simultaneously at various fields. [63][64] Millennials would like to work in organizations that are creative, innovative, energetic and environmentally friendly. [61][65] When comparing these former research conclusions to results of this paper, it could be clearly seen that commanding style authoritarian approach is not giving millennials the best possibility to gain working environment that they are expecting.

It also is seen from former research that communication and feedback are highly respected and craved with millennials.

Future research is still needed. Autocratic leadership style is recognized, and yet still utilized even in highly developed and free country, as it can be seen from data of this research. When is autocratic leadership needed in order to enhance organizational performance, if at all? What would be difference between different respondent groups regarding autocratic leadership? Which kind of results would other stereotypical leader analysis provide?

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