Learning organization through the internalization of transformational leadership: A study of an Indonesian school

Yoel Wibowo1*, Debora C. Widjaja2, and Foedjiawati3
1 Department of Hotel Management, Faculty of Business and Economics, Petra Christian University, Surabaya, 60236, Indonesia
2 Department of Hotel Management, Faculty of Business and Economics, Petra Christian University, Surabaya, 60236, Indonesia
3 Department of Creative Tourism, Faculty of Business and Economics, Petra Christian University, Surabaya, 60236, Indonesia

ARTICLE INFO

Keywords:
Transformational Leadership, Learning Organization, Millennials, School.

Article History:
Received 2022-01-18
Received in revised form 2022-05-27
Received in revised form 2022-07-28
Accepted 2022-08-05
DOI: 10.22146/jlo.72343

* Corresponding Author at Department of Hotel Management, Faculty of Business and Economics, Petra Christian University, Surabaya, 60236, Indonesia. E-mail address: yoel.wibowo@petra.ac.id, dwidjaja@petra.ac.id, fujiyu@petra.ac.id

ABSTRACT

Introduction: Conventional educational institutions around the world is currently hampered with disruptive wave. Educational institutions, particularly schools, stress the need of controlled change to keep up with external uncontrolled changes. Learning Organization (LO) is very suitable to be implemented in every educational institution due to its conformity with continuous improvement and learning process. Objectives: This study aims to investigate the impact of Transformational Leadership (TL) on the creation of LO in a private school in Indonesia, especially towards millennial employees working there. Novelty: This research is conducted in regard to the contextual (the implementation of TL in an educational institution and the inclusion of demographic factor) and the theoretical gap (detailed perspective on each of the dimension of TL and the use of second order modelling) left by previous researches. Research Method: This study is designed as an applied research adopting mixed method approach to provide better triangulation and elaboration towards the case. Data is collected through survey and follow-up interview towards the sample. Findings: This study points out that the implementation of TL has positive and significant impact on the creation of LO in the school, while millennial age group does not moderate the impact of TL towards LO. In addition, Intellectual Stimulation is revealed to be the most reflective dimension of TL. Those results imply that the ability to correctly identify the contribution of each dimension in the leadership system will determine the success rate of an organization to implement changes.

This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).
1. Introduction

School has been described as one of many components constructing value and belief system within society. Within this VUCA environment, they should be able to integrate their teachers and the other stakeholders within adapted pedagogical and didactic actions (Canzittu, 2020). This especially relevant with the current situation, in which during the early phase of the pandemic, about 3,000 tertiary education, 26,000 senior high schools, 40,000 junior high schools, and 170,000 primary schools were temporarily closed in Indonesia alone, forcing those institutions to conduct massive shift from physical or onsite, to virtual or online learning (Churiyah et al., 2020). This condition also serves as a ‘wake up call’ to test the ability and the agility of educational institutions in navigating through the inevitable crisis and unpredicted changes (Hadar et al., 2020).

As if the challenge is not difficult enough to handle, another heavy disruption is currently ongoing: the spread of Covid-19. Impacting almost every formal educational institution, the pandemic brings impact to all school’s stakeholders: students, parents, and especially teachers; particularly related with inevitable distant / remote learning activities (Purwanto et al., 2020). All of these changes and challenges require schools to put such great effort in empowering their human resources to proactively get involved in the process of learning and adaptation (Shin et al., 2017).

One of the efforts can be performed by transforming their organization into a particular organizational model which accommodates never-ending learning culture and promotes high regards towards their human resource development (Hurt, 2016).

Learning Organization is an organic organizational model that continuously experiment, improve, and increase its capability by emphasizing the importance of horizontal structure, empowerment, collaboration, and adaptation (Kessler et al., 2017). Learning Organization empowers the organization to be a facilitator, learning unit, and the end process (totally dependent and rests upon learning process) towards its members (Örtenblad, 2018).

The interesting fact related with Learning Organization is its conformity with the characteristics of millennial workers. Millennials, or those were born in the period between 1981 and 1996 (Loria & Lee, 2018), are having distinctive characteristics in their working traits. Millennials have progressive self-development which can be fostered flexible (agile) and customizable working environment (Kuron et al., 2015). Besides, their excessive expectations for their career are pushed mainly by one of their intrinsic work values: advancement or development (Kuron et al., 2015). Development itself is what Learning Organization is dealing with, on daily basis (Örtenblad, 2018). In school context, principals (normally classified into X generation) can best lead his millennial staff (particularly teachers) by creating an environment where they can to maximize their potentials (Bartz et al., 2017).

Learning Organization will not be created without support from the internal environment. Leadership is seen as one of the fundamental internal factors in the creation of Learning Organization (Phongsichomphu, 2013). Nevertheless, not all kinds of leadership possess significant impact towards towards the creation of Learning Organization. Transformational Leadership is a leadership system essential for building
and maintaining learning organization (Dumdum et al., 2013).

The nature of Transformational Leadership in changing and transforming all members within an organization to their fullest potential (Northouse, 2012), enable both leader(s) and subordinates to synergize in making a change in an organization. While Transformational Leadership is already an effective leadership style to lead people, it will be even more effective if it is used towards specific group of people (Jos Akkermans, 2018). Previous study has pointed out that especially intellectual stimulation and inspirational motivation are working effectively to support innovativeness (reflecting to the result of continuous learning process) especially among millennial employees, considering relatively high appreciation towards the opportunities for development (Jos Akkermans, 2018).

The organization becoming the subject of this research is a Christian private school (School X) located in Batu, Malang, East Java province of Indonesia. The organization is currently experiencing massive changes and challenges. These changes and challenges are especially affecting the organizational strategy to survive. The strategy needs to be addressed in order to deal with the impact of Covid-19 pandemic, especially related with social restrictions policy implemented by the government. The strategy was achieved by establishing one stop digital service for both teaching-learning activities and administration services, which then simply named as the ‘Smart System’. Some amount of the school fund (the leader refused to provide the detailed number) was then reallocated in order to hire a team of programmers and to conduct training programs to the teachers and administrators. This fund was before allocated for the physical renovation and constructions on the school’s consecutive year. Thorough implementation of the system is expected to provide immediate positive result in one or at the latest two months, due to the pressure from worsening pandemic situation. The change, which eventually impacts on almost all of the school’s stakeholders, has unfortunately taken longer time to provide desirable impact on the organization. Up until in the middle of 2021, the system has approximately only 50% - 60% exploited and implemented by the stakeholder, as claimed by the source. Some stakeholder even either reverted back to the ‘more convenient’ old systems (mostly requiring manual works / non-digitalized platforms) or use the ‘Smart System’ superficially, merely for formality. main cause of relatively slow progress in the new strategy is not only caused by its direct impact towards process, but also towards structure and people (organizational components). All of these components should be working inline with each other to produce significant impact. Unfortunately, the company is having a problem in synchronizing and optimizing its organization components to keep up with the change in the strategy, thus slowing the performance of the change. The organization human resources’ ability to keep up with the change is known to be performing weaker than expected. Varying traits, background, and personality of the people inside the organization complicate this problem. Therefore, the main problem with the optimization effort of the change mostly lies on its ‘people’ components, who unfortunately is lagging behind the other
components, such as strategy and process, particularly in responding the change.

Nevertheless, the problem with the change is unfortunately sourced on the inability of the leader to equally amplify all of the transformational dimensions (II, IM, IS, and IC) on his leadership. While claimed of having an outstanding quality on several particular dimensions, the leader needs to deliver more precise ways to amplify the other dimensions. This does not mean that the leader is not possessing ‘full score’ on one dimension and ‘zero’ on the others, but rather, they need to be delivered more accurately (‘bull’s eyes’) and equally in order to be more positively perceived by the other members of the organization.

Therefore, in response to the problems found on the organization, this research aims to:

1. Investigate the most reflective dimension of Transformational Leadership towards the overall leaders’ Transformational Leadership implementation at School X,
2. Investigate the impact of Transformational Leadership on the creation of Learning Organization model at School X, and
3. Investigate whether millennial age group provides moderating effect in reinforcing the impact of Transformational Leadership on the creation of Learning Organization at School X.

2. Literature Review

Transformational Leadership can be defined as a condition where empowerment is provided by the leader of an organization towards his subordinates, in order to nurtures his followers’ consciousness (Northouse, 2012). Furthermore, Bass and Avolio also explain that Transformational Leadership has 4 components within: Idealized Influence (II), Inspirational Motivation (IM), Intellectual Stimulation (IS), and Individual Consideration (IC) (Dumdum et al., 2013). Referring to Bass (Dumdum et al., 2013), Idealized Influence (II) and Inspirational Motivation (IM) is found to be the most reflective higher order construct of TL, as seen on the highest loading factor value. Nevertheless, Bass’ research was conducted in a military organization (US Army) which, like any other “we hear, we obey” organization, emphasizes on the importance of motivating ability, seniority, and professionalism – qualities that are strongly linked with both II and IM (Ozlen & Zukic, 2013). In educational organization context which has strong learning atmosphere, several researches on the context of TL at schools and higher education institutions have found IM as the most reflective dimension of TL. Research by Izham et al (2011) has shown all dimensions of TL correlates significantly on moderate level, where IM possesses the highest loading factor value. Meanwhile, research by Basham (Basham, 2012) has also cited IM as the most reflective dimension of TL in a successful higher education model; explaining that commitment, as the most important quality of an higher educational organization, is built by strong motivational skill of its leader. Therefore, based on the findings mentioned above, the first hypothesis is proposed:

**H1:** Inspirational Motivation is the most reflective dimension of Transformational Leadership at School X

Leadership process in schools, like every other organization, has significant direct impact towards the creation of Learning Organization (Baráth, 2015). In schools, leadership role is normally centered
around the principal. Principals are directly and indirectly responsible towards students, teachers, and other staff’s average performance; as well as towards the overall reputation of the school (Gurr, 2015). Principal with distinctive Transformational Leadership Characteristics will be able to exert his power in order to transform his organization (Gurr, 2015). Several example on how principal leadership may contribute to the creation of Learning Organization are through encouragement towards the teachers and staff, providing critique towards a problem, analyzing suggestions coming from the stakeholders, and identifying incoming challenges (Gil et al., 2019). Based on the relation between TL and LO as displayed above, the writer proposes the second hypothesis:

**H2:** Transformational Leadership has significant impact towards the creation of Learning Organization at School X

Research from Moore (Moore, 2014) investigating the moderating effect of generational affiliation towards the impact of psychological contract fulfillment on employee engagement is also performed in similar fashion, with each generation (gen X, Y, and Z) is classified based on mere demographic data. More recent researches regarding this moderating effect have also been performed by Wang et al (2018). In this research, moderating effect of millennials is determined by the demographic data of age (binary coded).

Closer in proximity with leadership variable, research from Thompson (Thompson, 2016) describes significant moderating effect of millennial workforce’s perception on a successful leadership skill enrichment towards more captivating, and more engaging organizational learning system. Organizational learning itself will act as the steppingstone for the creation of learning organization. The other research is coming from Wanasida et al (2021), who confirms significant moderating effect of age group (millenials), on the impact of TL towards an organization’s ability to be agile. Based on the moderating effect of millennials on the relation between TL and LO, as displayed above, the writer proposes the last hypothesis in this research:

**H3:** Millennial age group possesses moderating effect in reinforcing Transformational Leadership impact on Learning Organization

Hierarchical model of reflective second-order construct on the predictor is applied (Figure 2). This reflective-second order model is formed based on several previous research elevating the dimensions of TL. Research from Helmiatin (Helmiatin, 2014) regarding TL influence towards Quality of Work-life and Organizational Citizenship behavior adopts a second order model in which TL is reflected into four dimensions including charisma, individual attention, intellectual stimulation, and aspirations. Research Xu, et al (Xu et al., 2016) regarding the application of Multifactor Leadership Questionnaire (MLQ) is also based on a second order model in which TL is reflected into several factor models (dimensions).

**Figure 2. Research Design**
3. Method, Data, and Analysis

The research is designed as an applied research investigating the impact of Transformational Leadership towards the creation of Learning Organization. This research incorporates quantitative and qualitative approach, both conducted one after another or sequentially (Saunders et al, 2015), therefore the grand design of this research can be referred as a sequential–mixed method applied research. This approach is used in adopted in order to provide better triangulation through the application of more than a single method (methodical triangulation). In this research, the triangulation process is achieved by comparing the result of quantitative data analysis (involving the result of descriptive statistics and structural model analysis obtained through questionnaire) with the result of qualitative data (involving the result of data reduction, data display, and conclusion drawing). Whenever the result of two approaches are found to be confirming one another, the data is successfully triangulated (Miles & Huberman, 2014). Likewise, any discrepancy between the result of two approaches will be addressed and checked to find out the cause. Factors causing this discrepancy will later as well be elaborated on the analysis. The other reason of adopting mixed method is complementarity, which is used to clarify the previous method and achieve higher-order level (more holistic) of analysis towards the topic (Östlund et al, 2011). In this research, complementarity process is achieved by complementing the ‘holes’ left by the result of quantitative data (questionnaire), by utilizing information provided by the qualitative data (interview).

The scaling used to measure the application of Learning Organization is adopted from Tõnis Mets and Made Torokoff, which was actually developed from Senge’s five personal disciplines in Learning Organization. In order to pursue better novelty, this research will take the polished version of the Mets and Torokoff’s scaling developed by Yaşlıoğlu (2014). In the research, the scale has been considered valid and reliable, at least in the context of Turkish organizations. This scaling measures Learning Organization from the perspectives of internal environment, goals, and development and main processes as perceived by the employees; and internal environment and learning; shared values; and main processes as perceived by the employer(s). Nevertheless, in this research, the writer will focus only on the perspective of the employees, in order to simplify sampling, data collection, and the analysis process. In order to measure the organization’s leader Transformational Leadership, scaling initiated by Bass and Avolio (Dumdum et al., 2013) will be utilized. This research utilizes PLS (Partial Least Square) analytical model. The model is evaluated by considering both outer (convergent / AVE score; discriminant validity through cross loading, Fornell-Larcker and HTMT testings; and the combination of Cronbach’s Alpha as the lower bound and composite reliability as the upper bound) and inner model to measure the relation between independent (exogenous) and dependent variable (endogenous) of the research (R², bootstrapping, and blindfolding to find the Q² or the predictive relevance). This procedure will be the base to achieve the goodness of fit criteria (Hair et al, 2017) to test
the significance of the relationships in the model. This will indicate the explanatory power of the research model.

In this research, the target population include all of the teachers and staff (not including on the managerial position) currently working on the various units in School X, the designated educational institution located in Batu. The total number of this population is around 60 people. This group of people are directly impacted by the organizational change or intervention committed by the leaders in the organization. This group of people are represented by a number of sample. Purposive sampling is selected as the sampling technique in this research. The predetermined criterion for the sample are teachers and staff who have been working for at least 6 months at School X. Based on the Slovin’s formula and considering the number of population, the sample size should be at least 48 people. To help with the analysis, the number is rounded into 50. In School X, there has been relatively balanced composition between millennials and non millennials group (52 % and 48%). In this organization, millennials are coexisting with non-millennial employees as their numbers are relatively similar.

The qualitative data is obtained from direct interviews towards corresponding respondents is utilized to support the quantitative data. The initial interview (to gain insight regarding the root cause of the problem in the organization) is conducted towards the Head of Administration and Human Resource, with prior knowledge and approval from the head of Education Development Board (EDB) himself. Meanwhile, the follow-up interviews are conducted towards 2 teachers and 3 staff working in the organization. In order to cover as many perspectives as possible regarding the organizational problem, the composition is arranged as the following: the teachers are selected from different units, age groups, and working experience at School X; for the staff, they are selected from different position, age group, and working experience at School X.

4. Result and Discussion
4.1. Hypotheses testing

Based on the descriptive statistics analysis, Inspirational Motivation (IM) is perceived as the most exploited Transformational Leadership Qualities of the leader, as reflected on the highest average mean score of 4.11. Other qualities involving Idealized Influence (II), Individual Consideration (IC), and Intellectual Stimulation (IS) are perceived less exploited, respectively scoring 4.08, 4.01, and 3.94. Meanwhile, the average mean value for dimension LO is found to be 3.91, reflecting that most respondents have agreed to the existence of LO within the organization.

Based on the structural model generated on Smart PLS 3.0, all indicators have all possessed outer loading value above 0.5 on the outer model analysis, therefore all are considered valid. On the second-order construct, Intellectual Stimulation (IS) becomes the most reflective dimension of sub-construct TL, by having the outer loading value of 0.964. Surprisingly, Inspirational Motivation (IM) becomes the weaker reflective sub-construct by scoring outer loading value of just 0.959. This can be translated that in the case of School X, IS becomes the most reflective dimension towards overall TL’s effort in providing
impact towards LO while II becomes the least reflective dimension. The fact that IS, not IM, becomes the most reflective dimension of sub-construct TL rejects the first hypothesis / H1 (Inspirational Motivation as the most reflective dimension of Transformational Leadership at School X).

Despite some dimensions are more reflective than others, they do not translate that less reflective dimensions should be omitted on the model. As proven by the convergent validity value, all indicators on each sub constructs have been proven of highly reflect their first-order construct. As performed by several previous researches executing reflective model in analyzing TL, this model serves its purpose in providing an alternate perspective to analyze Bass and Avolio’s 4 TL dimensions, instead of creating a new theory about it.

Evaluation towards inner model is also conducted by considering the value of $R^2$ or the coefficient of determination. $R^2$ value of LO as influenced by second-order construct (TL) is 0.6129 or 61%. Observing especially on the $R^2$ value of LO (61%), the relationship lies on the moderate level. ‘Goodness of Fit’ criteria in PLS model is measured through the value of $Q^2$ or the predictive of relevance. The value of $Q^2$ is obtained through blindfolding procedure. Especially on the impact of the predictor towards LO, the $Q^2$ value is found to be 0.348, implying that the second-order predictor is good and relevant (from the perspective of $Q^2$).

As the result of the first hypothesis has been concluded during outer model evaluation, bootstrapping sequence focuses on providing conclusion towards the second and the third hypotheses. Relationship between variables considered significant only if it has a p-value < 0.05. Based on the path coefficients analysis, relationship between second order construct (TL) to LO is positive and significant, as shown on the p-value of 0.00. Therefore, it can be concluded that H2 (Transformational Leadership has significant impact towards the creation of Learning Organization at School X) is accepted.

On the other hand, the moderating effect of millennial age group towards LO is having p-value of 0.056, in which the relationship between variables considered significant only if it has a value < 0.05. Despite slightly scoring above the threshold, this result points that millennial age group does not possess significant moderating effect in reinforcing TL impact towards LO. Reflecting to the model, it can also be said that millennial age does not possess significant relationship especially on its direct relation with LO. This finding therefore concludes the final hypothesis: H3 (Millennial age group possesses moderating effect in reinforcing Transformational Leadership impact on Learning Organization) is rejected.

4.2. Qualitative analysis on the impact of overall transformational leadership towards learning organization

The result of analysis reveals a positive and significant relationship between second-order construct (TL) and the creation of LO. This result is then confirmed by the qualitative data obtained from the interview activity.

The relationship between TL and LO in this organization can be tracked based on the LO dimensions proposed by Senge’s dimension of LO: System Thinking, Mental Model, Shared Vision, Personal Mastery, and
Team Learning (Aşcı et al., 2016; Di Schiena et al., 2013; Baráth, 2015; and Pui Teng & Hassan, 2015). Despite not confirmed by all of the interviewees, the leader’s TL qualities is strongly linked with obvious development atmosphere in the organization. Not only the development is running well, but also the people is able to functioning on the peak performance while committing to the task. The leader’s strong principle (of performing extra miles) has pushed he himself to think of a better and more suitable system (‘smart system’) that can support distant learning and administration process in the school during pandemic crisis, despite of resistance and inevitable investment that should be paid in form of time, energy, and of obviously financial. Statements (Mrs. R’s) mentioning how people in the organization should keep in pace and perform constant adjustment with this system are the most noticeable signs of the connection. This spirit introduces people within the organization with learning environment (as they are ‘pushed’ to learn new things) in order to be flexible and adaptive (Di Schiena et al., 2013). These actions introduce new mental and system thinking model among the members of the organization, becoming the first sign of LO existence at School X.

People under the leadership system are also exposed on the vision shared by the leader, as mentioned by some interviewees. Indirectly, this amplifies a clear vision of the organization (becoming a ‘smart’ school) and reinforces commitment among the organization members to learn the new changes, particularly during difficult times in education business. Finally, this spirit pushes the members of the organization to strive and unlock their potential (‘functioning in the maximum level’) in learning particularly the new ‘smart system’.

Some respondents have claimed that the leader’s TL can also be seen on the way he consolidates the organization members’ learning effort especially towards the new system (smart system). In the smart system context, it is revealed that the leader can predict or anticipate what would be needed by the members of the organization prior the implementation of the system (by forming a support team before the change). This affirms what has been delivered by Mirkamali et al. (2011), that preparation is one of the key factors in the learning organization, as it ‘warms up’ the work environment to execute changes. This pre-formed support unit also acts as an ‘essential tool’ in supporting a learning environment within the organization (Mirkamali et al., 2011). All of these actions can be seen as the resemblance of personal mastery dimension of LO at School X.

From the statements delivered by one of the interviewees, the leader is known to be providing individual support thoroughly and continuously (‘until the staff completely understands about the material’) through private counselling if needed, and also through the help from the support team. In addition, the leader is also known to be providing continuous information sharing and directing appropriate needs based on the organization members’ scale of priority. These knowledge sharing actions nurture learning atmosphere within the organization. The ability to predict people’s needs as well as continuous and personalized individual support prove to be beneficial in ensuring knowledge sharing between organization members and in warranting the
new knowledge that has already been obtained (Di Schiena et al., 2013).

Finally, LO atmosphere is also created by the leader’s direct involvement in organizational activities and collaboration effort, as mentioned by the interviewees. This efforts clearly goes in-line with a statement from Pui Teng & Hassan (2015). The statement itself mentions that a leader should involve the whole organization in important decision makings, as well as be able to provide challenge towards his employees by questioning assumptions, reframing problems, and finding new point of view. These strong values of collaboration and involvement can be perceived as a real example of team learning dimension of LO at School X.

4.3. Qualitative analysis on the impact of overall transformational leadership towards learning organization

Claimed to be having a direct impact with the creation of LO (particularly within system thinking process) by Di Schiena et al (2013), IS is found to be the most reflective sub-construct establishing TL influence towards LO in this research.

Based on the interview, it is known that the leader’s IS qualities are mostly amplified by eliciting active responses from the employees, working beyond excellence (performing extra miles), providing a good climate to develop their creativity in the workplace, entrusting them with new responsibilities, and opening himself for critics and suggestion (each mentioned at least by two informants). It it important to note that some IS qualities here are coincidentally overlapping with other transformational leadership qualities; for example, entrusting new responsibilities, and providing trust can be perceived as a strategy for both stimulating employees’ intellectual (IS) and for motivating them (IM).

Trust is also given towards most of the employee, obviously in appropriate portion especially in professional context. Releaxed atmosphere, the feeling of being appreciated, and encouragement prove to be more effective in eliciting self learning environment and extra miles (‘develop creativity’ or ‘doing our responsibility well’) among the employees, rather than by performing inspection or tight monitoring. All of these, has at least become a stepping point for LO as the spirit of LO may begin with appreciation towards new thoughts and creativity (Mirkamali et al., 2011).

Reflecting on the finding, IS is revealed to be most reflective reflective sub construct on TL. Several keywords are obtained including how IS in this organization has successfully developed its members creativity, promoted collaborative action in learning, as well as contagiously elicited innovation on the other units within the organization. Collaborative nature, especially if emphasized on the leadership system, is a distinguishing indicator whether an organization has successfully implemented learning organization. No learning organization will ever be established without collaborative nature within its members, as collaboration itself contributes in promoting team learning, one of the dimensions of learning organization (Chen, 2011). According to the respondents, the quality of collaborative efforts on the organization can be improved by performing peer teaching and learning between fellow teachers and staff (especially in learning together about the smart system), conducting meetings more regularly, and sharing (in terms of information, knowledge, and equipment) activities.

Creativity and innovation, acting as another result of IS dimension in the leadership system, are also a strong contributor of team learning (Erdem et al, 2014). Previous research in similar kind of organization (school) has pointed out team
learning as the most crucial and strategic element in establishing learning organization (Kools & Stoll, 2016), this is the strong point explaining why IS is becoming the most reflective sub-construct of TL in this research.

An interesting fact regarding the most reflective dimension of TL can also be traced back on the result of the descriptive statistics analysis. Reflecting on the result of the mean analysis, IM is found to be the most perceived dimension of TL. This is logical since motivating action in form of praise, appreciation, and even reprimand is delivered in daily basis by the leader, as pointed out by the informants. Nevertheless, contrary with the result of the loading factor value, this perception actually supports the original hypothesis (H2). This means that while most members of the organization have actually perceived IM as the most obvious TL quality displayed by the leader, it is IS which turns out to be the most reflective dimension on the overall TL. This discrepancy indicates that the leader should amplify his IS even more than he amplifies his IM. This is due to the fact that IS delivers better contribution towards his TL, rather than IM which merely wins the overall perception. Despite the discrepancy, the importance of both IM and IS dimensions in establishing Learning Organization is supported by Akkermans’ (2018) study, which pointed out that IS and IM are instead working more effectively, compared with other qualities of Transformational Leadership, on their role to support innovation, creativity, and learning spirit in an organization.

4.4. Qualitative analysis on the moderating effect of millennials (on the impact of transformational leadership towards learning organization)

From the quantitative analysis, it has been known that millennial age group does not possess significant moderating effect in reinforcing TL impact towards LO at School X, referring to the p-value of 0.056. Thus, this result does not share similar result with the one conducted by Wanasida et al (2021), who confirms significant moderating effect of age group (millennials) in an organization.

An important information from one of the informants, Mrs. S, elaborates the most probable cause of this not significant moderating effect: Collaboration atmosphere has been well established in the organization, even without significant influence from the leadership system. This collaborative nature, which is existing on ‘leader to employee’ and ‘employee to employee’ relationship level, has also been elaborated particularly within the discussion of the first and the second hypotheses. Also referring to the discussion and the organization assessment, this nature has long known been nurtured even before the current leader leads the organization. Based on the statements, both millennial and non-millennial staff (including the leader himself) have had collaborative nature in solving working problems autonomously, especially learning issues, without or with very little influence from the leadership system. This enables all members of the organization to keep in pace with the learning curve, gain similar level of understanding, and reduce knowledge/skill gap between members of the organization regardless of age factor. All of these have even been established without LO being thoroughly and ideally implemented on the organization. Paradoxically, this nurtured culture is becoming the foundation for the organization to fully establish LO, particularly on the relation with Senge’s shared vision dimension in the organization. Leaders of the organization, nevertheless, should be aware of this positive culture and ‘well exploit’ it to boost the success rate of the change within the organization (for example, in this case, related with the implementation of the ‘Smart System’).

5. Conclusion and Suggestion
Transformational Leadership, in general, has positive and significant impact on the establishment of Learning Organization at School X. Several concrete TL actions can are known of providing benefit to Senge’s various Learning Organization dimensions (Aşcı et al, 2016; Di Schiena et al., 2013; Baráth, 2015; and Pui Teng & Hassan, 2015) and therefore should be nurtured. Mental Model and System Thinking are represented on the ‘spirit of excellence’ and ‘extra miles’ working habit, which pushes all organization members to keep in pace and being agile. Shared Vision dimension in represented on the Smart School Ideals which reinforces organization members’ commitment to learn new changes. Personal Mastery dimension is introduced on the formation of support team, private counselling program, acknowledgement of organization members’ needs based on the scale of priority, and information sharing. Finally, Team Learning is represented on the collaborative environment, warm welcome towards critics and suggestion, and involvement of the organization members on various activities and decision makings.

For the leaders, the ability to correctly identify both the lowest and the highest contributing dimension in a leadership system will determine the success rate of implemented change. Particularly for the subject organization in this research, the finding pointing out Idealized Influence (II) as the lowest contributing dimension is worth taken note as a reflection by the leader to improve his II dimension in the leadership by improving his self-stance and consistency in applying particular policies. Meanwhile, the finding pointing out Intellectual Stimulation (IS) as the most reflective leadership dimension should be translated as a logical reason to even more boost the ‘already good’ effort to incite working innovation and creativity in the organization on the learning atmosphere in the organization (particularly in this case, related with the digitalization process as a response towards ongoing disruption). This result also has a silver lining with the implementation of the change implemented on the school (Smart System), as observed from the interview result. In order to establish the Smart System which provide more regards towards the sustainability between leaders, members of the organization, and the organization itself; leaders of the organization is not only required to provide continuous motivation to the members of the organization, but also to provide more relaxed atmosphere, trust, and encouragement in order to elicit the members of the organization to conveniently experimenting and maximizing the yield of the Smart System according to their own preferences (of course, to certain extent).

An action research form in a similar organization (educational institution) may be conducted by adopting similar topic and variables to prove the consistency between the result of applied research and action research. Nevertheless, organization in other fields are also becoming gap available for future research.

**Acknowledgement**

Thank you for Petra Christian University (PCU) and Hotel Management Program of PCU for the opportunity; for the Directorate General of Higher Education, Research and Technology - Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia, for the full funding granted for this research; and for Master Program of Management Studies PCU, all of the supervisors, board of examiners, lecturers, and colleagues for their supports in technical terms.

**References**


Miles, M. B., & Huberman, A. M. (2014). Qualitative data analysis: An expanded sourcebook. SAGE.


