



DOI 10.2478/sbe-2024-0007

SBE no. 19(1) 2024

EXAMINING THE RELATIONSHIPS BETWEEN TRANSFORMATIONAL AND TRANSACTIONAL LEADERSHIP AND EMPLOYEE ENGAGEMENT DURING THE COVID-19 PANDEMIC: THE MODERATING EFFECT OF EMPLOYEE GENERATIONS

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Abstract:

This study examines the effects of various dimensions of transformational (i.e., charismatic leadership, intellectual stimulation, inspirational motivation, individual consideration) and transactional (i.e., contingent reward, and active management by exception) leadership on employee engagement during the COVID-19 pandemic. Additionally, this study explored moderating effects of generational differences (including Generation Z, Generation Y, Generation X) on the relationships between leadership and employee engagement. Based on a sample of 546 employees of three different generations, the findings of the multiple regression analysis showed mixed findings. Implications and future directions for this study were discussed.

Key words: *Employee Engagement, Leadership, Generational Differences*

1. Introduction

Employee engagement is readily tied to the organizational performance of a company (Hansen, Byrne, & Kiersch, 2014; Nienaber & Martins, 2020). The prevalence of daily leadership and leader behavior have an important impact on employees' daily engagement (Breevaart, Bakker, Hetland, Demerouti, Olsen, & Espevik, 2014).

There have been many studies that examined the associations between transformational leadership and employee engagement in organizations (Basu & Mukherjee, 2019; Douglas & Roberts, 2020; Deichmann & Stam, 2015; Ghadi, Fernando, & Caputi, 2013; Hernandez-Bark, Escartin, Schuh, & Van Dick, 2016; Kunze & Bruch, 2010). For example, much research has examined the positive impacts of charismatic leadership style on employee engagement (Babcock-Roberson, & Strickland, 2010; Islam et al., 2021; Kolodinsky, Ritchie, & Kuna, 2018; Bru, Virtanen, Kjetilstad, & Niemiec, 2021). A numerous

studies have also done in investigating the positive relationship between inspirational motivation and employee engagement (Deichmann & Stam, 2015; Edgar, 2015; Filsecker & Hickey, 2014; Geue, 2018; Salas-Vallina & Fernandez, 2017). Many articles have reported empirical evidence of the positive impacts of intellectual stimulation on employee engagement (Bolkan, 2015; Oprea et al., 2020; Sandvik et al., 2017; Xu, Du, Lei, & Hipel, 2020). Numerous studies showed a positive relationship between individual consideration and employee engagement (Arnold, Loughlin, & Walsh, 2016; Heffner & Antaramian, 2016; Kleinaltenkamp, Karpen, Plewa, Jaakkola, Conduit, 2019; Yoerger, Crowe, & Allen, 2015;).

Similarly, a number of studies have been conducted on the effects of transactional leadership and employee engagement (Aboramadan, & Khalid, 2020; Li, Castano, & Li, 2018; Martin, 2015; Ng, & Sears, 2012; Wolfram & Gratton, 2014; Zhang, Avery, Bergsteiner, & More, 2014;). For instance, much research has investigated the positive impact of the contingent reward on employee engagement (Breevaart et al., 2014; Ge et al., 2020; Wolfram & Gratton, 2014; Wu, Li, Zheng, Guo, 2020) as well as the positive relationship between the active management by exception and employee engagement (Howell & Hall-Merenda, 1999; Prochazka, Gilova, & Vaculik, 2017; Washington, Sutton, & Sauser, 2014).

However, not many studies have researched how all six dimensions such as charismatic leadership, inspirational motivation, intellectual stimulation, individual consideration, contingent reward, and active management by exception collectively affect employee engagement in organizations. Also, few studies have examined the differences of the impacts of the six factors on engagement among three different generations – Gen Z, Gen Y, and Gen X, – during the COVID-19 pandemic.

In conclusion, this study attempts to fill these gap in the management literature by exploring the moderating effects of generation differences on the relationships between six dimensions of transformational and transactional leadership and employee engagement in organizations during the Covid-19 pandemic.

2. Literature review

Charismatic Leadership and Employee Engagement

Babcock-Roberson and Strickland (2010) examined how work engagement mediated the impact of a leader's charisma on organizational citizenship behaviors. Based on 91 participants who completed the Multifactor Leadership Questionnaire, the results of the study revealed that there was a significantly positive relationship between charismatic leadership and work engagement.

Islam and colleagues (2021) examined the impact of transformational leadership, which includes charismatic leadership on employee engagement during organizational changes. A survey was conducted from employees in the banking industry of Bangladesh, and a structural equation modeling was used to analyze the data in this study. The results indicated that transformational leadership was positively associated with employee engagement.

Bako (2018) explored differences in leadership style preferences among different generations in the workplace. According to her study, individuals from different generations tend to prefer different leadership styles because they have their own values that are most

important to them in their personal and professional lives. Data were collected from 228 participants from five universities in Istanbul, and MANOVA and ANOVA were used to test significant differences in leadership styles among four different generations including Baby Boomers, Gen X, Gen Y, and Gen Z. The results found that Gen Z preferred charismatic leadership styles significantly higher than Gen X.

Hypothesis 1a: Charismatic leadership is positively related to employee engagement.

Hypothesis 1b: Generations moderate the relationship between charismatic leadership and employee engagement, such that charismatic leadership is more positively related to employee engagement of Gen Z than other generation groups.

Inspirational Motivation and Employee Engagement

Salas-Vallina and Fernandez (2017) investigated the relationship between inspirational leadership, participative decision making, and happiness at work among medical specialists in Spanish hospitals. A structural equation modeling was used to test the the mediating effect of participative decision making on the relationship between inspirational leadership and happiness at work. The study concluded that participative decision making played a critical rol in understanding the effect of inspirational leadership on employee engagement, as the results showed that it fully mediated the relationship between inspirational leadership and happiness at work. Given that employees are highly engaged when they participate in decision-making processes, we can argue that there would be a positive relationship between inspirational leadership and employee engagement.

Geue (2018) sought to examine the relation between positivity and inspiration in the workplace with employee engagement. The study involved exploratory factor analysis in order to measure positive practices within the workplace. The study revealed that in intensive service industries, positivity will promote engagement within a team via prosocial actions that relate to those factors embodying inspirational motivation.

Lee, Aravamudhan, Roback, Lim, and Ruane (2021) examined several factors such as leadership, work-life balance, autonomy, and technology that would influence Gen Z employee engagement. The results of a regression analysis showed that, among all factors included, transformational leadership including inspirational motivation had the most strongest effect on Gen Z employee engagement.

Hypothesis 2a: Inspirational motivation is positively related to employee engagement.

Hypothesis 2b: Generations moderate the relationship between inspirational motivation and employee engagement, such that inspirational motivation is more positively related to employee engagement of Gen Z than other generation groups.

Intellectual Stimulation and Employee Engagement

Sandvik and colleagues (2017) developed a theoretical model to study the role of intrinsic motivation and autonomy as it relates to intellectual stimulation in the workplace. Using multilevel data collected over two iterations in two years, they found that leaders with intellectual stimulation behavior will promote employee team autonomy and intrinsic motivation, which in turn may increase their creative climate. The relationship between intellectual stimulation and engagement stems from the increase in autotelic activities, where employees derive rewards from their involvement or participation.

Bolkan (2015) investigated the relationship between intellectual stimulation and intrinsic motivation in an academic setting. The author gathered data by observing behaviors of instructors and students. Drawing from survey responses of a sample of 234 university students, the results of the study showed that affective learning and engagement mediated the relationship between intellectual stimulation and intrinsic motivation.

According to Gabrielova & Buchko (2021) Gen Z considers personal development and internal growth opportunities as the most important value and enjoys new and fun ways to do things. Thus, Gen Z prefers a leader who is highly competent and can provide opportunities to create challenges. Similarly, Gabriel and coauthors (2022) studied the effects of dimensions of transformational leadership on employee retention and innovative behavior of Gen Z employees. Based on 178 respondents in star class hotels in Malaysia, they found that intellectual stimulation had a strong positive relationship with Gen Z employee retention, which was influenced by employee engagement.

Hypothesis 3a: Intellectual stimulation is positively related to employee engagement.

Hypothesis 3b: Generations moderate the relationship between intellectual stimulation and employee engagement, such that intellectual stimulation is more positively related to employee engagement of Gen Z than other generation groups.

Individual Consideration and Employee Engagement

Kleinaltenkamp et al. (2019) conducted a study on individual-level engagement, considerations of customer engagement, and emotional connections in organizational settings. This article includes ten propositions and emphasizes the multidimensional nature of engagement. The research concludes that engagement serves as an important mechanism for taking emotions into account in business marketing, a topic that has been largely overlooked.

Yoerger and colleagues (2015) examined the relationship between participation in decision-making in meetings and employee engagement. Using moderated hierarchical regression analysis, the researchers also explored how the relationship was moderated by perceived supervisor support and meeting load. The study concluded that when managers provide support to employees, listen to their thoughts, and allow greater participation, employees feel obligated to be more engaged in the workplace.

Putriastuti and Stasi (2019) proposed “the most optimum leadership style” for Gen Y employees based on a comprehensive review on five major leadership theory. According

to the study, Gen Y, also called as Millennials, tends to favour individual attention and communication than other generations. Therefore, Gen Y, unlike other generations, prefers leaders who build interpersonal relationship with them and care about employees.

Hypothesis 4a: Individual consideration is positively related to employee engagement.

Hypothesis 4b: Generations moderate the relationship between individual consideration and employee engagement, such that individual consideration is more positively related to employee engagement of Gen Y than other generation groups.

Contingent Reward and Employee Engagement

Ge et al. (2020) researched the different extrinsic motivation-based relationships among contingent rewards and punishments, task performance, job engagement, and job creativity. A study was conducted where a model of contingent incentives, ambition, competition, and word performance was developed using a multiple-case, inductive approach. The results showed that contingent rewards have positive relationships with job engagement and job creativity through ambition and competition.

Breevaart et al. (2014) sought to find a relationship between contingent reward and engagement. Based on multilevel regression analyses, the study found that contingent reward was positively related to work engagement, and fostered a more favorable work environment.

Arora and Dhole (2019) researched the various expectations of Gen Y employees in relation to their job experiences, considerations, expectations, values, aspirations, and engagement in the workplace. They used a quantitative research method of studying 520 millennial employees from various industries. They studied the HR practices, employee development methods, and rewards structure. With a moderator of organizational reward structure, the results of the study indicated that Gen Y employees exhibited higher levels of work engagement as compared to Gen X employees. Similarly, Twenge and colleagues (2010) empirically examined generational differences in work values. Using a extensive data from U.S. high school seniors in 1976, 1991, and 2006, the study found that Gen Y employees gave the extrinsic rewards the greatest importance than previous generations such as Baby Boomers and Gen X employees.

Hypothesis 5a: Contingent rewards is positively related to employee engagement.

Hypothesis 5b: Generations moderate the relationship between contingent rewards and employee engagement, such that contingent rewards is more positively related to employee engagement of Gen Y than other generation groups.

Active Management by Exception and Employee Engagement

Although some studies have suggested that active management by exception was not related to work engagement (e.g., Breevaart et al., 2014) or was negatively related to work engagement (e.g., Wang, Hsieh, & Wang, 2020), a majority of studies have found that

active management by exception was positively related to work engagement. For instance, Washington and coauthors (2014) examined the relationships between various leadership characteristics, including transformational and transactional leadership, and work engagement. The study concluded that active management by exception could be a form of servant leadership. Therefore, they believe that is why servant leadership has a positive relationship with transactional active management by exception.

Using one-year longitudinal data, Howell and Hall-Merenda (1999) found the positive relationship between active management by exception and employee performance, which was strongly related to employee engagement (Hansen, Byrne, & Kiersch, 2015; Nienaber & Martins, 2020).

Prochaka and colleagues (2017) examined the relationship between leadership and subordinate engagement. A total of 307 sample was collected from working-age population in Czech Republic. Using the structural equation model, the study also showed the positive association between active management by exception and subordinate engagement, and the relationship was partially mediated by self-efficacy.

Sessa, Kabacoff, Deal, and Brown (2017) examined how leader values and leadership behaviors differ across generations based on generational cohort theory. To understand differences among managers of four different generations, they conducted two different studies using two different large databases. The results of two studies showed that Gen X prefers getting frequent feedback, whereas Gen Y does not. Additionally, people from Gen X prefer leaders who recognize their talents and provide feedback on their performance.

Hypothesis 6a: Active management by exception is positively related to employee engagement.

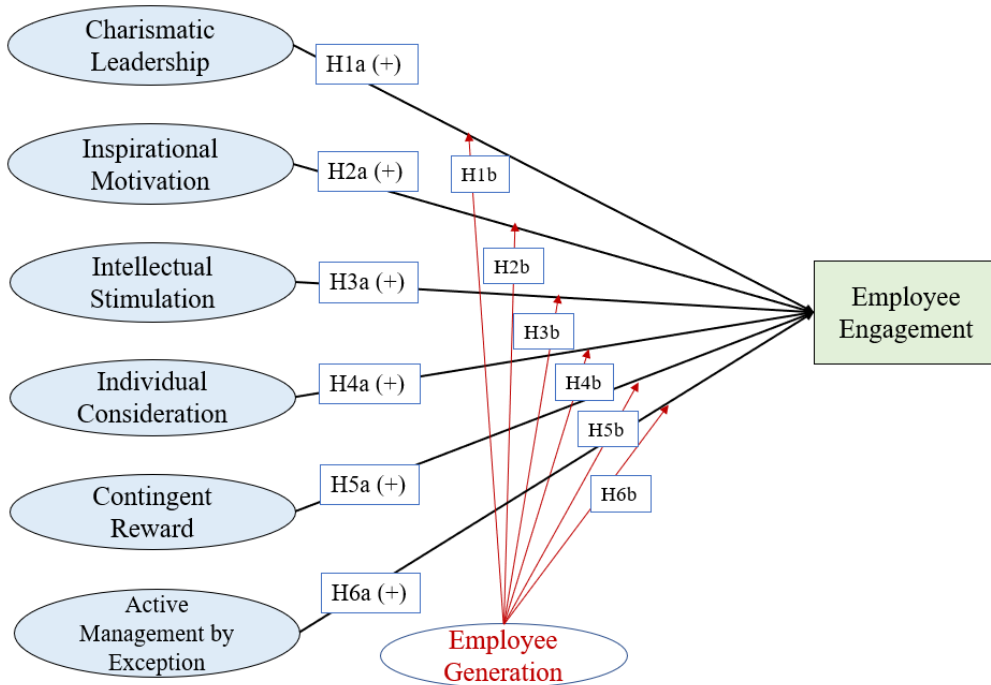
Hypothesis 6b: Generations moderate the relationship between active management by exception and employee engagement, such that active management by exception is more positively related to employee engagement of Gen X than other generation groups.

3. Methodology

The survey data were collected from Amazon's Mechanical Turk and students from an University in the United States. We aimed to recruit a relatively equal number of participants from three different generations, namely Gen Z, Gen Y, and Gen X. Participants should be employed and aged from 18 to 55 years old in order to be eligible to participate the survey. The survey was conducted for a week in the third week of April, 2020, resulting in 220 responses. In the fourth week of August 2020, another survey was administered using Amazon Mechanical Turk, and 350 responses were collected. Additionally, 51 survey responses from senior undergraduate and MBA students from a Northeastern public university were collected. In total, 621 valid responses were collected. After deleting the repeated responses, the responses with multiple missing values, and responses with poor quality, the final data comprised 546 responses.

Figure 1 provides an overview of our research framework and all variables in this study.

Figure 1. An Overview of the Research Framework



Employee engagement

The dependent variable for this study was employee engagement. Schaufeli, Bakker, and Salanova (2006) proposed three dimensions to measure work engagement – vigor, dedication, and absorption –, and developed three items per each dimension. One item per dimension was chosen for this study, so we measured how much an employee was engaged at the workplace using three items: (1) I am enthusiastic about my job; (2) When I get up in the morning, I feel like going to work; and (3) I feel happy when I am working intensely. Cronbach’s alpha for this scale was .90.

Charismatic Leadership

We measured charismatic leadership using three items based on studies by Bass and Avolio (2000) and Avolio and Bass (2004): (1) My leader makes everyone around him/her enthusiastic about assignments; (2) I have complete faith in my leader; and (3) My leader encourages me to express my ideas and opinions. Cronbach’s alpha for this scale was .90.

Inspirational Motivation

Following Bass and Avolio (2000) and Avolio and Bass (2004), we measured inspirational motivation using three items: (1) My leader is an inspiration to us; (2) My leader inspires loyalty to him/her; and (3) My leader inspires loyalty to the organization. Cronbach's alpha for this scale was .93.

Intellectual Stimulation

Three items were used to measure intellectual stimulation based on studies by Bass and Avolio (2000) and Avolio and Bass (2004): (1) My leader's ideas have forced me to rethink some of my own ideas, which I had never questioned before; (2) My leader enables me to think about old problems in new ways; and (3) My leader has provided me with new ways of looking at things, which used to be a puzzle for me. Cronbach's alpha for this scale was .88.

Individual Consideration

We measured individual consideration using three items from studies by Bass and Avolio (2000) and Avolio and Bass (2004): (1) My leader gives personal attention to members who seem neglected; (2) My leader finds out what I want and tries to help me get it; and (3) I can count on my leader to express his/her appreciation when I do a good job. Cronbach's alpha for this scale was .89.

Contingent Reward

Based on studies by Bass and Avolio (2000) and Avolio and Bass (2004), we used three items to measure contingent reward: (1) My leader tells me what to do if I want to be rewarded for my efforts; (2) There is a close agreement between what I am expected to put into the group effort and what I can get out of it; and (3) Whenever I feel like it, I can negotiate with my leader about what I can get from what I accomplish. Cronbach's alpha for this scale was .82.

Active Management by Exception

Three items were used to measure intellectual stimulation based on studies by Bass and Avolio (2000) and Avolio and Bass (2004): (1) My leader asks no more of me than what is absolutely essential to get the work done; (2) It is all right if I take the initiative, but my leader does not encourage me to do so; and (3) My leader only tells me what I have to know to do my job. Cronbach's alpha for this scale was .64.

Gen Z, Gen Y, and Gen X

Dhopade (2016) defined Gen Z as individuals born between 1993 and 2011, while other studies described Gen Z as those born after 1994 (Batech, 2019), born between 1995 and 2015 (Kasasa, 2020), born between 1996 and 2010 (Brown, Shallcross, & Stuebs, 2019), or born between 1997 and 2013 (Schroth, 2019). Based on these studies, we concluded that individuals of Gen Z were those who were born anytime between 1993 and 1997. To establish a representative birth year for individuals of Gen Z, the middle value, 1995, was used for this study. Thus, respondents were categorized into three generations

for this study as of April 2020: Gen Z (18 to 24 years old), Gen Y (25 to 39 years old), and Gen X (40 to 55 years old).

Analytical Model

This study proposed an employee engagement model using a regression analysis. Employee engagement was used for the dependent variable in the proposed regression model while the six dimensions of leadership such as charismatic leadership, inspirational motivation, intellectual stimulation, individual consideration, contingent reward, and active management by exception served as independent variables. The multiple regression model was expressed as follows:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6$$

where Y = Employee Engagement
X₁ = Charismatic Leadership
X₂ = Inspirational Motivation
X₃ = Intellectual Stimulation
X₄ = Individual Consideration
X₅ = Contingent Reward
X₆ = Active Management by Exception

In addition to run regression models separately for all generations, Gen Z, Gen Y, and Gen X to examine main effects of leadership variables on employee engagement, we also tested moderating effects of generations on the relationship between six dimensions of leadership and employee engagement. In order to do that, dummy variables were created for Gen Y and Z, leaving Gen X as the comparison group. Note that, prior to running the regression analyses, independent variables were mean-centered, and all interaction terms were calculated using mean-centered scores in order to minimize multicollinearity (Aiken & West, 1991).

4. Results

Table 1 shows Pearson correlations between two variables for all data (N = 546). Gen Z consists of 136 people, 24.6% of the total population surveyed. Gen Y accounts for 307 people, 56.2% of the total population surveyed. Gen X makes up for the least amount of people surveyed at 87, 15.9% of the total population surveyed. These three generations and missing values account for 546 people in total after the survey was taken by each. Employee engagement was significantly correlated with Charismatic Leadership, Inspirational Motivation, Intellectual Stimulation, Individual Consideration, and Contingent Reward ($p < .01$). Also, employee engagement was correlated with active management by exception ($p < .05$).

Table 1. Descriptive Statistics and Correlation Analysis for All Data (N = 546)

	Mean	SD	N	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1)ENGE	4.893	1.625	546	(.90)						
(2) LFC	4.948	1.528	546	.696**	(.90)					
(3) LFIM	4.847	1.621	546	.683**	.911**	(.93)				
(4) LFIS	4.668	1.455	546	.619**	.818**	.814**	(.88)			
(5) LFIC	4.855	1.529	546	.590**	.845**	.832**	.850**	(.89)		
(6) LTCR	4.736	1.428	546	.594**	.786**	.769**	.806**	.812**	(.82)	
(7) LTME	4.025	1.365	546	.098*	.130**	.140**	.163**	.076	.205**	(.64)

Note: *p < .05, **p < .01. Cronbach's alphas appear across the diagonal in parentheses.

The first regression model tested all data (N = 546) and included six independent variables – Charismatic Leadership (LFC), Inspirational Motivation (LFIM), Intellectual Stimulation (LFIS), Individual Consideration (LFIC), Contingent Reward (LTCR), and Active Management by Exception (LTME) to estimate the dependent variable, that is, employee engagement. The overall model was statistically significant [$R^2 = 0.509$, Adjusted $R^2 = 0.504$, $F(6, 539) = 93.219$, $p = 0.000$; $CI = 28.887$]. The regression model explained 50.9% of the variance in the employee. Charismatic leadership ($B = .444$, $p < .01$), Inspirational Motivation ($B = .269$, $p < .01$) were positively related to employee engagement. Also, although it was marginally significant, Contingent Rewards was also positively related to employee engagement ($B = .122$, $p < .10$). Individual Consideration was significantly related to employee engagement, but in an opposite direction ($B = -.198$, $p < .01$). Active management by exception, however, were not significantly related to employee engagement. The results on the full regression model are presented in Table 2.

Table 2. Regression Model Results for All Employees (N = 546)

DV = Engagement; $R^2 = .509$, Adjusted $R^2 = .504$; $F(6, 539) = 93.219$, $p = 0.000$; $CI = 28.887$					
	B	SE	BETA	t	p
(Constant)	4.896	.049		99.918	.000
LFC	.444**	.086	.418	5.174	<.001
LFIM	.269**	.078	.268	3.456	<.001
LFIS	.151*	.073	.135	2.074	.039
LFIC	-.198**	.075	-.187	-2.646	.008
LTCR	.122#	.066	.107	1.845	.066
LTME	-.028	.037	-.024	-.761	.447

Note: #p < .10, *p < .05, **p < .01; DV = Dependent variable; CI = Condition Index, B = Regression Coefficient, SE = Standard error, BETA = Standardized regression coefficient

Generation Z (Gen Z)

As shown in Table 3, the overall model for Gen Z employees was statistically significant [$R^2 = 0.537$, Adjusted $R^2 = 0.515$, $F(6, 129) = 24.919$, $p = 0.000$]. The regression model explained 53.7% of the variance in the employee engagement. Specifically, Charismatic Leadership ($B = .753$, $p < .01$) was positively related to employee engagement, but Individual Consideration ($B = -.456$, $p < .01$) was negatively related to employee engagement. Inspirational Motivation, Intellectual Stimulation, Contingent Reward, and

Active Management by Exception were not significantly related to employee engagement for Gen Z employees.

Table 3. Regression Model Results for Gen Z Employees Only (N = 136)

DV = Engagement; R ² = .537, Adjusted R ² = .515; F (6, 129) = 24.919, p = 0.000; CI = 29.444					
	B	SE	BETA	t	p
(Constant)	4.760	.107		44.558	<.001
LFC	.753**	.182	.654	4.140	<.001
LFIM	.285	.180	.260	1.580	.117
LFIS	.059	.147	.051	.403	.688
LFIC	-.456**	.160	-.405	-2.845	.005
LTCR	.178	.150	.148	1.181	.240
LTME	.012	.079	.009	.152	.879

Note: #p < .10, *p < .05, **p < .01; DV = Dependent variable; CI = Condition Index, B = Regression Coefficient, SE = Standard error, BETA = Standardized regression coefficient

Generation Y (Gen Y)

As shown in Table 4, the overall model for Gen Y employees was statistically significant [R² = 0.527, Adjusted R² = 0.518, F (6, 300) = 55.775, p = 0.000]. The regression model explained 52.7% of the variance in the employee engagement. Specifically, Charismatic Leadership (B =.421, p < .01) was positively related to employee engagement. Also, although it was marginally significant, Contingent Rewards was also positively related to employee engagement (B = .161, p < .10). Inspirational Motivation, Intellectual Stimulation, Individual Consideration, and Active Management by Exception were not significantly related to employee engagement for Gen Y employees.

Table 4. Regression Model Results for Gen Y Employees Only (N = 307)

DV = Engagement; R ² = .527, Adjusted R ² = .518; F (6, 300) = 55.775, p = 0.000; CI = 28.775					
	B	SE	BETA	t	p
(Constant)	4.921	.061		80.570	<.001
LFC	.421**	.107	.418	3.943	<.001
LFIM	.149	.096	.158	1.551	.122
LFIS	.083	.097	.077	.848	.397
LFIC	-.023	.099	-.022	-.230	.818
LTCR	.161#	.084	.143	1.925	.055
LTME	-.024	.047	-.022	-.504	.614

Note: #p < .10, *p < .05, **p < .01; DV = Dependent variable; CI = Condition Index, B = Regression Coefficient, SE = Standard error, BETA = Standardized regression coefficient

Generation X (Gen X)

As shown in Table 5, the overall model for Gen X employees was statistically significant [R² = 0.640, Adjusted R²= 0.613, F (6, 80) = 23.737, p = 0.000]. The regression model explained 64.0% of the variance in the employee engagement. Specifically, Inspirational Motivation was positively related to Engagement (B = .773, p < .01), while Charismatic Leadership, Intellectual Stimulation, Individual Consideration, Contingent Reward, and Active Management by Exception were not significantly related to employee engagement for Gen X employees.

Table 5. Regression Model Results for Gen X Employees Only (N = 87)

DV = Engagement; R ² = .640, Adjusted R ² = .613; F (6, 80) = 23.737, p = 0.000; CI = 29.519					
	B	SE	BETA	t	p
(Constant)	4.969	.118		42.016	<.001
LFC	.139	.206	.128	.673	.503
LFIM	.773**	.173	.753	4.479	<.001
LFIS	.128	.165	.113	.778	.439
LFIC	-.237	.155	-.232	-1.532	.129
LTCR	.028	.139	.026	.202	.840
LTME	-.002	.094	-.001	-.021	.983

Note: #p < .10, *p < .05, **p < .01; DV = Dependent variable; CI = Condition Index, B = Regression Coefficient, SE = Standard error, BETA = Standardized regression coefficient

Generational Differences in the Effects on Leadership on Engagement

In order to examine the significant differences among different generations in the effects of leadership variables on employee engagement, interaction terms were added in the analysis. As shown in Table 6, the full regression model with eight independent variables (six leadership variables and two dummy variables for generations) and twelve interaction variables between leadership variables and generation dummy variables as independent variables explained 55.4% of the variance in the employee engagement. The model was statistically significant [R² = .554, Adjusted R² = .536, F (20, 509) = 31.612, p = 0.000]. Specifically, three interaction effects were found to be statistically significant in the analysis - the interactions (1) between Charismatic Leadership and Gen Z, (2) between Inspirational Motivation and Gen Y, and (3) between Inspirational Motivation and Gen Z.

Table 6. Generational Differences in the Effects of Leadership on Employee Engagement

DV = Engagement; R ² = .554, Adjusted R ² = .536; F (20, 509) = 31.612, p = 0.000					
	B	SE	BETA	t	p
(Constant)	4.969	.123		40.394	<.001
LFC	.139	.215	.131	.647	.518
LFIM	.773**	.180	.771	4.307	<.001
LFIS	.128	.172	.115	.748	.455
LFIC	-.237	.161	-.222	-1.473	.141
LTCR	.028	.144	.025	.195	.846
LTME	-.002	.098	-.002	-.021	.984
Gen Y	-.048	.138	-.015	-.350	.727
Gen Z	-.210	.156	-.056	-1.341	.180
LFCxGen Y	.282	.242	.200	1.166	.244
LFCxGen Z	.614*	.270	.292	2.273	.023
LFIMxGen Y	-.624**	.206	-.472	-3.035	.003
LFIMxGen Z	-.488*	.242	-.244	-2.015	.044
LFISxGen Y	-.046	.199	-.031	-.229	.819
LFISxGen Z	-.069	.217	-.032	-.318	.751
LFICxGen Y	.214	.191	.146	1.119	.263
LFICxGen Z	-.219	.216	-.107	-1.014	.311
LTCRxGen Y	.133	.169	.084	.792	.429

LTCRxGen Z	.150	.198	.068	.756	.450
LTMEExGen Y	-.022	.109	-.014	-.198	.843
LTMEExGen Z	.014	.121	.006	.116	.907

Note: DV = Dependent variable; B = Regression Coefficient, SE = Standard error, BETA = Standardized regression coefficient

To better understand the moderating effects of generations on the relationships between leadership variables and engagement, we plotted the significant interaction effects following the procedures by Aiken and West (1991). As shown in Figure 1 and 2, Charismatic Leadership had a stronger positive effect on employee engagement for Gen Z employees compared to Gen Y and X. On the other hand, Inspirational Motivation had a stronger positive effect on employee engagement for Gen X employees compared to Gen Y and Gen Z.

Figure 2. Generational Differences in the Effect of Charismatic Leadership on Employee Engagement

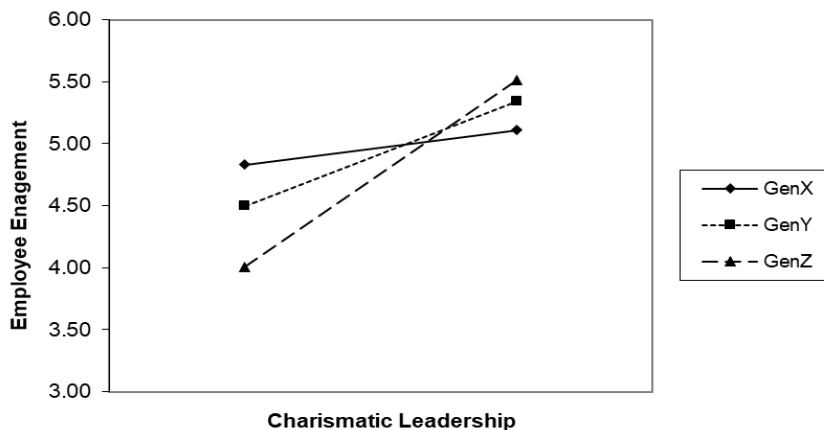
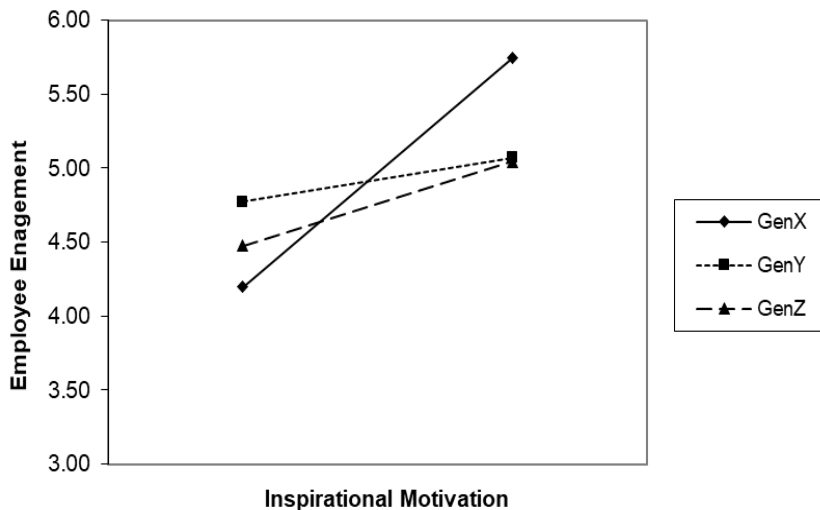


Figure 3. Generational Differences in the Effect of Inspirational Motivation on Employee Engagement



5. Discussion

Leadership on Employee Engagement

The evidence showed support for some of hypotheses on the main effects of leadership on employee engagement. The results showed that charismatic leadership was positively related to employee engagement, supporting H1a. Our finding was consistent with the literature which suggested that supportive leadership has a strong positive relationship to employee engagement (Kolodinsky et al., 2018). We suggest that the positive relationship between charismatic leadership and employee engagement lies in an individual's desire for professional and emotional support in the workplace. As a leader embodies the features of charismatic leadership, an employee feels ownership within the workplace, and a desire to engage with one's work.

The results showed that inspirational motivation was positively related to employee engagement, supporting H2a. The findings were consistent with the literature which suggested that prosocial actions relating to factors embodying inspirational motivation were positively related to engagement (Geue, 2018). We attributed the significant relationship between inspirational motivation and employee engagement to parameters surrounding the pandemic. As many were getting frustrated with current work and life settings, leaders were articulating long-term in an attempt to motivate via optimistic future perceptions and compelling visions of what's to come. With a strong desire to reenter normalcy, engagement increased with such motivations.

The results showed that intellectual stimulation was positively related to employee engagement, supporting H3a. The result was consistent with the literature which supported the claim that intellectual stimulation is positively related to work engagement of employees (Sandvik et al., 2017). We attributed the significant relation between intellectual stimulation and work engagement of employees to there being different industries in which employees may be more engaged than others depending on the amount of intellectual stimulation present. Different industries may require a larger amount of engagement than others, resulting a more significant relationship between engagement and intellectual stimulation.

The results showed the significant relationship between individual consideration and employee engagement. However, opposite to what was hypothesized, individual consideration was negatively related to employee engagement, not supporting H4a.

Although it is marginally significant, the results showed that contingent rewards was positively related to employee engagement, supporting H5a. The finding was consistent with the literature which supported the claim that contingent rewards has a positive impact on job engagement (Breevaart et al., 2014; Ge et al., 2020).

The result from our analysis showed that the active management by exception was not statistically significant, failing to support H6a. The finding was not surprising given the inconsistent findings of the relationship between active management by exception and employee engagement in the previous studies (Breevaart et al., 2004; Howell & Hall-Merenda, 1999; Wang et al., 2020; Washington et al., 2014).

Generational Differences in the Effects of Leadership on Employee Engagement

The evidence showed mixed support for hypotheses on the moderating effect of generations on the relationship between leadership and employee engagement. The results of each generation showed that charismatic leadership were positively related to employee engagement of Gen X, Y, and Z. Furthermore, the results of the moderation analysis showed that the positive relationship between charismatic leadership and employee engagement was stronger for Gen Z compared to Gen X and Y. Thus, H1b was supported. The results supported the literature which concluded that charismatic leadership led to more engagement by younger generations (Kolodinsky, et al., 2018).

The results of each generation showed that inspirational motivation was positively related to employee engagement of Gen X only. Moreover, the results of the moderation analysis showed that the positive relationship between inspirational motivation and employee engagement was stronger for Gen X compared to Gen Y and Z, opposed to H2b. Therefore, H2b was not supported. The findings were inconclusive with the literature which concluded that inspirational motivation was positively related to Gen Z and Gen Y employee engagement (Filsecker & Hickey, 2014). We attributed the inconclusive relationship between inspirational motivation and Gen Z engagement to the fact that those in the literature were on the younger side of the Gen Z range. It might not have been the most representative sample to draw conclusions from. Additionally, we found it interesting that results showed that the opposite end - Gen X - actually had significant relationship between inspirational motivation and engagement. This can possibly be attributed to Gen X's position on the labor force timeline, nearing retirement and excited about post-professional life.

The results of each generation showed that none of the generations showed a significant positive relationship between intellectual stimulation and employee engagement. Also, no significant moderation effects of generations were found in the moderation analysis, not supporting H3b. The results were not consistent with the literature which supported the claim that younger generations' intellectual stimulation is more positively related to work engagement (Xu, et al., 2020). We attributed the lack of significance between younger generations and the relationship with intellectual stimulation to the lack of evidence to support this hypothesis. While the literature made this claim, the evidence from our survey did not yield the results suggested in the article. This can be due to a smaller sample size.

The results of each generation showed that individual consideration was significantly, albeit negatively, related to employee engagement of Gen Z. Also, no significant moderation effects of generation were found in the moderation analysis, not supporting H4b. The results were not consistent with the literature which claimed that millennials would have greater engagement in light of individual consideration (Arnold et al., 2016).

The results of each generation showed that contingent rewards was positively, albeit marginally, related to employee engagement of Gen Y. However, no significant moderation effects of generation were found in the moderation analysis, partially supporting H5b. Our finding aligned with the literature from Arora and Dhole (2019) that Gen Y were more engaged at work than Gen X, but further research may be needed to find statistical significance of this relationship.

The results of each generation showed that none of the generations showed a significant relationship between active management by exception and employee engagement. Also, no significant moderation effects of generation were found in the moderation analysis, not supporting H6b. The findings were inconsistent with Eagley et al. (2003), who found that there was a relationship between the two variables.

6. Managerial Implications

This research study provided insight on the impacts of transformational and transactional leadership on employee engagement of different generations in the workplace. The evidence suggested that managers could achieve increased employee engagement - which directly relates to productivity and profitability - by proactively supporting charismatic leadership and inspirational motivation leadership methods. Managerial implications from this research hold the key to creating a more engaged workforce and positive results for any organization.

Gen Z

The results have proven important managerial implications. Based on the findings of this study, it's the implication that the factors of charismatic leadership is most closely related to increased work engagement for Gen Z. The correlation analysis and regression model show significant relationships when these variables interact. The evidence suggests Gen Z responds to elements of a role model that can be modeled. Leaders should look to provide this figure when interacting with Gen Z in the workplace.

Gen Y

The results have proven important managerial implications related to Gen Y. Based on the findings of this study, it's the implication that the factor of charismatic leadership is most closely related to increased work engagement for this generation. The correlation analysis and regression model both prove significant relationships when these variables interact. Like Gen Z, the evidence proves that Gen Y seeks the elements of charismatic leadership in the workplace and directly attributes engagement levels based off this variable. Leaders looking to mobilize the Gen Y employee in the workplace should look to effectively utilize communication skills, persuasiveness, and charm to influence and connect on a deeper level.

Gen X

The results have proven important managerial implications related to Gen X. Based on the findings of this study, it's the implication that the factor of inspirational motivation is most closely related to increased work engagement for Gen X. The correlation analysis and regression model both prove significant relationships when these variables interact. Gen X seeks the elements of inspirational motivation, but only that, as the other variables did not show any level of significance with Gen X. Leaders looking to mobilize the Gen X employee in the workplace should effectively utilize inspiration and communication skills to appeal to Gen X.

7. Limitations and Future Research

There are several limitations to this research, thus future research is needed. First, the sample size of the research could be expanded to include individuals in the study. By targeting a larger audience outside of the initial study parameters, the study will be more inclusive of larger random samples of workplace employees. Future studies can retest the uncorrelated independent variables within the expanded data set and compare findings. Second, future research would be needed to determine other possible internal or external factors that affect employee engagement in addition to transformational and transactional leadership. Third, future research can include other possible moderator such as gender, education, organizational tenure, or years of industry experience. Lastly, we utilized a multiple regression model. To enhance research findings, future studies can utilize structural equation models (SEM) or partial least squares-SEM.

8. References

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