

Title Page

Gen Z's Leadership Strategy in the Student Movement: A Factor Analysis on July Revolution in Bangladesh.

Muslima Zahan, and Atikur R. Khan

School of Business and Economics, North South University,
Dhaka, Bangladesh,

Email of the Corresponding author: muslima.zahan@northsouth.edu

Email of co-author: Atikur.khan@northsouth.edu

and

Golam M. Mathbor

School of Social Work, Monmouth University,
New Jersey, USA

Email of co-author: gmathbor@monmouth.edu

Gen Z's Leadership Strategy in the Student Movement: A Factor Analysis on July Revolution in Bangladesh.

Abstract

Purpose This paper explores the GenZ (Generation Zoomer) leadership pattern and strategic factors in an unusual especially emergent and uncertain situation; the July revolution in Bangladesh in 2024.

Design/Methodology/Approach The authors surveyed direct and indirect participants (students of school, college and university; n=2120) using five-point scale data (strongly agree to strongly disagree) of ten strategic factors to draw a structured equation model (SEM). The study used confirmatory factor analysis to test its hypotheses.

Findings Adaptive and Resilient Leadership (ARL) is the key to realization of GenZ strategy with the direct contribution of Decentralized and Collective Leadership (DCML) as well as Use of Hashtag and Viral Campaign (UHVC). At the revolutionary era of 4.0, Global Connectivity and Networked Leadership (GCNL), Crowdsourcing and Collective Intelligence (CCI) as well as Emotional and Value-based Leadership are worth to incorporate into leadership phenomenon. Digital Activism and Mobilization (DAM) as well as Narrative and Storytelling in digital communication (NSDC) directly contribute to all other factors to enhance the effectiveness of Adaptive and Resilient Leadership (ARL) which shows Gen-Z's leadership dynamics in the revolutionary ambient.

Originality/Value This study determines the mindset of digitalized, young generation's leadership strategy. With relevant traits, enormous contingencies, adaptive behavioural pattern, team of nation's participation and transactions of common goods together surpass all the obstacles to reach to a visionary platform. Being adaptive and resilient along the time strategic leaders conform the meticulous balancing between people and activities. Thus, the research explores the factors to build an updated leadership framework to resolve power, prosper, and moreover, the people.

Keywords Leadership, Strategy, July Revolution, Student Movement, Student Protest, GenZ, Bangladesh.

Paper type Research Paper

1. Introduction

Students' movement has had a pivotal role in shaping the political and social landscape not only in Bangladesh but in many countries. The role played by the 1952 language movement (bhasha andolan) in East Pakistan ([Hussain, 2012](#)) in the development of a Bengali nationalist discourse ([Alam, 1991](#)), student movement of 1968-69 in Pakistan (then East Pakistan) against the authoritarian rule ([Khan, 2022](#)), and the bloodiest liberation war leading to the creation of an independent Bangladesh on December 16, 1971 ([Christiansen, 2019](#); [Maniruzzaman, 1980](#)) are few of the examples. Even after the liberation war several students' movements played crucial role in Bangladesh history including mass protest against the military dictatorship in 1990 ([Nasrin & Rahman, 2019](#)), the quota reform movement for the Civil Service Job in 2018, the road safety movement for enforcement transport sector regulations, safety standard as well as traffic management system in 2018 ([Ghosh, 2024](#); [Tanjeem & Fatima, 2023](#)) and the very recent July movement in 2024 ([Azim & Zaman, 2024](#)). The use of social media such as Facebook; hashtags, live videos, memes and images helped to amplify the movement's reach, making it a national and international issue ([Ta'amneh & Al-Ghazo, 2021](#); [Hasan et al., 2020](#); [Afrin, 2024](#)).

Besides Bangladesh, a few other revolutionary movements worldwide are worth to address in alignment with the current political and social change context. In the United States, the civil rights movement saw significant contributions from students, particularly with events like the Greensboro sit-in of 1960, where African American students protested against racial segregation in public places ([Anderson, 1997](#)). The anti-Vietnam War protests during the 1960s and 1970s also saw significant participation from students, who organized mass demonstrations against the US involvement in Vietnam ([Hall, 2008](#)). Similarly, in France, the May 1968 student protests were a major turning point, leading to widespread social unrest and bringing together students and workers in a powerful demonstration against the government's policies ([Seidman, 2004](#)). The Umbrella Movement of 2014 and the anti-extradition law protests of 2019 for democratic reform showed significant change globally ([Wang, 2023](#)). In Chile, student protests in the early 2010s demanded free and quality education, highlighting issues of social inequality and mobilizing the broader public in calls for systemic change ([Donoso, 2013](#); [Donoso et al., 2023](#)).

Students' movement have also played a vital role in Egypt during the 2011 Arab Spring uprising to demand political reform, employment opportunities, protect academic freedom and promote political pluralism. Student unions, informal networks, and social media platforms played key roles in mobilizing, organizing demonstrations, disseminating information about government abuses and human rights violations ([El-Ghobashy, 2012](#); [Tadros, 2012](#)). Throughout the revolution, students remained at the forefront of calling for democratic reforms, free from corruption, economic opportunities and greater political freedom-stating the Tunisian revolutionary movement, commonly referred to as the Jasmine Revolution, which took place in late 2010 and early 2011 ([El-Khawas, 2012](#)). Tunisian youth affirms that this cohort is unlikely to change its course of political action regardless of who is in power. Young Tunisians appear to care less about measuring the democratic progress of the country through elections, representation, and regime change but are more concerned about the presence of corruption, political infighting, and Tunisia's stagnating economy. ([Dobbs, 2021](#)). Youth engagement on Nepal's political Evolution could also be cited as example ([Acharya, 2024](#)). Economic hardship such as cost of living, authoritarian rule and political repression also led to a

revolutionary movement in Sudan in 2019. Students from universities and even from schools; specially young women were instrumental, persisted in their activism despite facing harsh crackdown, and social media played a vital role for coordination, information sharing and gain international attention ([Bakhit, 2023](#); [Handique, 2020](#); [Gizouli, 2019](#)). Students were also in the forefront of the revolutionary movement in Sri Lanka: for equitable society, against economic disparity and corruption ([Obeyesekere, 1974](#); [Moore, 1993](#)); particularly during the protest of 2022 to alleviate economic crisis and political mismanagement and suppression, corruption in public administration, inflation and social justice ([Fernando, 2023](#)).

Again, Students utilized social media platforms extensively to mobilize support and organize protests. Facebook, Twitter, and YouTube were crucial in disseminating information about the government's actions and coordinating demonstrations helped sustain the protests and brought together various segments of society in solidarity against the authoritarian regime ([Breuer et al., 2015](#)). They were instrumental in organizing mass protests, sit-ins, and social media campaigns, leveraging their networks and platforms to mobilize public opinion against the government ([Singh & Bhargavi, 2024](#)).

In Bangladesh, the students' movement once emerged for quota reform (social justice) in 2018 and revolted again in July 2024 (later referred as July Revolution) in response to reinstating a 30% quota for descendants of freedom fighters by the Supreme Court of Bangladesh, demanding discrimination free civil service job opportunities under the Discrimination Free Student Movement (Boisshommyobirodhi Chhatro Aandolon). The student protests on political change in Bangladesh 2024 served as a catalyst for heightened political awareness among the youth, leading to increased demands for democratic governance and transparency. Additionally, the key factors that contributed to the success of these protests, including the use of social media for mobilization, strategic alliances with civil society organizations, and effective leadership by student groups. Two special elements are very obvious here based on previous movements and the July Revolution took place recently; the school-college-university students massively embraced information technology with diversified leadership traits and tactics to mobilize and organize events like processions, public meetings, assemblage, Bangla Blockade, procession for repugnance (Drohojatra), Complete Shutdown, and March for Dhaka.

GenZ leadership and use of technology

Leadership is leaders inducing followers to act for certain goals that represent the values and the motivations—the wants and needs, the aspirations and expectations—of both leaders and followers ([Burns' leadership, 1978](#)). This concept of leadership is based on the idea of transformational leadership, which involves leaders working with followers to identify needed change, creating a vision to guide the change through inspiration, and executing the change in tandem with committed members of the group. In brief Leadership is the capacity to translate vision into reality ([Bennis, 1989](#)) and Leadership is influence – nothing more, nothing less ([Maxwell, 1998](#)). Generations Zoomers (GenZ) leadership is the very concurrent phenomenon. This leadership is highly purpose-driven, with a focus on social issues and ethical standards. Leaders from this generation are more likely to align their leadership with causes they are passionate about, such as climate change, social justice, and equality ([Liveris, 2023](#)). Gen Z leaders are digital natives who naturally integrate technology into their leadership styles. They use data-driven approaches to make decisions and leverage digital tools to enhance communication, productivity, and efficiency. These leaders are adept at navigating digital

platforms, utilizing social media, and using data analytics to inform their strategies. They prioritize social justice, environmental sustainability, and ethical behaviour in their leadership practices ([Seemiller & Grace, 2016](#)). They are highly adaptive and resilient, often navigating change with agility and leveraging technology to address challenges ([Rainer & Rainer, 2018](#)). Unlike from transformational leadership involves a more hierarchical and top-down approach, GenZ leadership is typically more decentralized, inclusive and collaborative, reflecting a preference for flat organizational structures and participatory decision-making ([Bas & Riggio, 2006](#)). Often seen in grassroots movements, digital activism, and innovative sectors where speed, adaptability, and inclusivity are crucial ([Philips, 2024](#)). Thus, Gen Z leadership reflects the unique traits, values, approaches and strategies of the generation born between 1997 and 2012, who are characterized by their digital fluency, desire for authenticity, and emphasis on social justice.

2. Literature review and hypothesis development

The July Revolution is emblematic of how GenZ (Generation Zoomers) absorbed leadership, redefined chain of command and directing followers through communicating, particularly through the use of digital tools. Not only ground-breaking but also inventive and reflective in broader leadership theory and exercise are identified in this generations' leadership approaches. Based on the latest literature, this section explores the dynamic factors of Gen Z leadership and strategies, focusing on digital communication tools, and draws parallels with other political revolutionary attempts.

Leadership strategy often includes identifying key issues, engaging stakeholders, formulating clear objectives, and using effective communication channels to galvanize support. [Sharp \(2005\)](#) highlights that nonviolent resistance approach has often been more effective in achieving long-term goals as it appeals to a broader audience and maintains moral high ground. Several other patterns are Grassroot organization ([Christens et. Al., 2021](#)), Coalition building ([Smith, 2024](#)), Digital activism ([Cheng et. al., 2024](#)) and mobilization ([Saka, 2017](#)). Effective leadership strategies in student movements ensure that efforts are strategically planned, coherent, sustained, and aligned with the movement's values and desired outcomes ([Snow et. al., 2004](#)). Therefore, some strategic factors of student movement of the July Revolution are identified through exploring various experts' opinion and discussed below:

Decentralized and Collective Leadership

Gen Z leadership is characterized by a decentralized and collaborative approach, often referred to as "shared leadership" ([Dinh et al., 2014](#)). This contrasts with traditional hierarchical structures and allows for a more inclusive decision-making process, which is particularly evident in the July Revolution. Gen Z often identified a group-based approach to leadership, where decision-making is distributed among members or groups rather than being centralized to a single person. Even the terminology to identify different group leaders are called in an innovative term Coordinator (Shomonoyok, date) or Coordinator of Coordinators. The use of social media platforms like Twitter, Facebook, and Instagram facilitates this decentralized approach, enabling rapid mobilization and coordination without the need for a central leader ([Lee et al., 2021](#); [Leong et al., 2020](#)).

This movement can be characterized by unified front to promote inclusivity and diverse voices, building partnership across sectors and with civil society, and mentorship from experience

leaders to strengthen the movement. Their decentralized and collective approach can be compared to the leadership style during the Arab Spring, where social media played a crucial role in organizing protests without a central leadership figure ([Howard & Hussain, 2013](#); [Arafa & Armstrong, 2016](#)). Based on the above discussion the following hypothesis can be proposed:

Null Hypothesis (H0)1: There is no significant relationship between the adoption of decentralized and collective leadership models and the effectiveness of protest mobilization among Gen Z participants.

Emotional Appeal and Value-Based Leadership

Gen Z leaders often tap into the emotional resonance of their message, connecting with the values and beliefs of their followers. They use emotional appeal to highlight the injustices they are fighting against, making the cause relatable and urgent to their audience. This approach helps in building a strong emotional connection with supporters. Emotional appeal and value-based leadership are significant factors in Gen Z's approach, as leaders seek to connect with followers on a personal level by aligning with shared values and emotions ([Barbuto & Burbach, 2006](#)). In July movement leaders effectively used digital platforms to express solidarity and shared goals, appealing to the emotional and moral convictions of the participants. This approach mirrors the tactics used during the Civil Rights Movement in the United States, where leaders like Martin Luther King Jr. employed emotional and value-based rhetoric to galvanize support and action ([Carson, 2003](#)). GenZ movement emphasizes ethical standards and human rights in activism with community engagement. They build public support through emotional and value driven narratives as well as provide emotional support and mental health resources for activists by resilience building. Based on this discussion the proposed hypothesis can be:

Null Hypothesis (H0)2: Emotional appeal and value-based leadership do not significantly influence the motivation levels of Gen Z students protest.

Adaptive and Resilient Leadership

During the 36 days long movement the students changes their quota reform to nine points and later nine points compressed in one. The leaders demonstrate adaptability and resilience, particularly in dynamic environments where they must respond quickly to changes or challenges ([Heifetz, 1994](#)). The number of supporters increased as the barriers to revolution multiplied. The showed alternative channels and methods to cope up with the situation. During the Zapatista movement, leaders adapted to governmental crackdowns by using alternative communication channels, showing resilience in the face of adversity ([Clever, 1998](#)). GenZ;s strategies were flexible adapting to changing political and social landscape and pivoting tactics in response to government crackdowns.

Global Connectivity and Networked Leadership

Cross-Sector Cooperation is found through in GenZ's leadership, Collaborating with international NGOs and organizations. As a result, #KeepItOn Coalition-a global network of over 300 civil society organizations 105 countries worldwide appeal to the highest authority to end internet shutdown added an extra momentum to this movement. The anti-globalization protests utilized global networks to coordinate actions across multiple countries, reflecting the interconnected nature of modern activism ([Tarrow, 2005](#)). Many students communicated not

only to various social media platform but also global news channels to obtain greater impact and support from non-residents Bangladeshi, publish news to connect international activists. The movement is characterised by global solidarity to amplify local cause. Thus, the leadership style is characterized by global connectivity, leveraging networks that transcend national boundaries to build coalitions and share resources ([Castells, 2010](#)).

Digital Activism and Mobilization

Gen Z leaders are digital natives, and their fluency with digital tools is a defining factor of their leadership and communication strategies ([Prensky, 2001](#)). The use of hashtags, viral videos, and online petitions during the July Revolution exemplifies how digital communication tools are leveraged to amplify messages and mobilize support quickly and efficiently ([Kaplan & Haenlein, 2010](#)). The students leverage platforms like Twitter and WhatsApp for real-time updates, resource sharing, and organizing protests ([Bennett & Segerberg, 2012](#)). Digital platform such as online messenger group played a vital role to promote and unite onto their mission specially for the real time coordination. Rapid dissemination of critical information about impediments by government through legal forces; police movement and optimize protesters routes and logistics means or location are always known to everyone through technology integration. This integration of AI and advanced technology in leadership strategies allows leaders to analyse data in real-time, predict trends, and make informed decisions quickly ([Madanchian, et al., 2024](#)). This resembles the use of social media during the Occupy Wall Street movement allowed protesters to organize and disseminate information quickly, bypassing traditional media ([Castells, 2012](#)). Based on this discussion the proposed hypothesis is:

***Null Hypothesis (H0)3:** The use of digital activism and mobilization does not significantly impact the scale and reach of protest participation among Gen Z student movement in July Revolution.*

Use of Hashtags and Viral Campaigns

Hashtags and viral content are essential tools for spreading messages rapidly and broadly. They help in creating a unified narrative and allow supporters to engage in the conversation. Hashtags are a powerful tool in Gen Z's communication arsenal, used to create viral campaigns that amplify their messages and mobilize support ([Bruns & Burgess, 2011](#)). The #BlackLivesMatter movement which advocates for justice and equality ([Taylor, 2016](#)) gained traction through the use of hashtags, which helped to unite protesters and spread awareness globally ([Jackson et al., 2020](#)). These tools can quickly turn local issues into global discourse by amplifying the voice of the marginal communities ([Rickford, 2016](#)) to reach to a global audience ([Cox, 2017](#)) and create huge impact of the movement. #StudentProtests, #SaveBangladeshiStudents, #Bangladesh become prominent source of information. Three essential points are obvious: creative protests employing symbolic online tactics, digital culture incorporating memes ([Shifman, 2014](#)) and digital trends to engage and inspire, and finally campaigning through hashtags to intensify the movement's reach. Memes played a significant role in the 2019 Chilean protests, where they were used to critique government policies and rally support ([Valenzuela, 2019](#)).

Based on this discussion the proposed hypothesis is:

Null Hypothesis (H0)4: The use of hashtags and viral campaigns on social media does not significantly affect the visibility and public support for Gen Z-led protests in July Movement.

Transparency and Accountability through Digital Platforms:

Transparent leadership ensures that the goals, strategies, and decisions of the movement are openly communicated to all members, reducing the chances of misinformation and internal conflicts ([Morris, 1984](#)). Accountability, on the other hand, ensures that leaders are responsible for their actions, promoting ethical conduct and maintaining the integrity of the movement ([Della Porta & Diani, 2006](#)). In leadership, accountability means leaders are responsible for their actions, decisions, and the outcomes that follow, which enhances trust among team members and the public ([Eisenbeiss, 2012](#)). Together, these elements are essential for ethical leadership, as they help maintain integrity and promote a culture of honesty and ethical behaviour ([Miao et al., 2013](#)). Together, these leadership strategies create a foundation of trust and legitimacy, which is crucial for the success and sustainability of student movements ([Tilly & Wood, 2009](#)). Gen Z students prioritize transparency and accountability, often using digital platforms to ensure that leadership actions and decisions are open to scrutiny by followers ([Pfeffer, 2010](#)). In this movement, students getting shot by police in the streets and fire from the Helicopter to the protested students ignite the mass community to be united. Using digital platforms transparency in leadership and actions, gauging public opinion through surveys and polls ensure transparent mechanism for incorporating feedback into strategies. As in the 2019 Hong Kong protests the use of Telegram and Twitter ([Xinyue, 2023](#)) with live-streaming during protests, provided real-time accountability and transparency in leadership actions. Based on the above discussion the proposed hypothesis is:

Null Hypothesis (H0)5: There is no significant effect of transparency and accountability through digital platforms on the trust and credibility of Gen Z protest leaders.

Rapid Information Dissemination and Crisis Management:

Modern student movements often integrate technology into their crisis management strategies. By combining rapid information dissemination with robust crisis management practices, student movements can enhance their resilience and achieve their objectives more effectively ([Tilly & Wood, 2009](#)). Rapid information dissemination ensures that movement participants and supporters are promptly informed about developments, events, and changes. This quick spread of information fosters a sense of unity and collective purpose among participants, which is essential for maintaining momentum and morale ([Tufekci, 2017](#)). By anticipating potential crises and preparing to address them, student movements can maintain their momentum and credibility even in the face of adversity.

A vital aspect of crisis management is ensuring medical support for participants, which includes having trained medical volunteers on-site, first aid kits available, and pre-arranged access to medical facilities ([Della Porta & Tarrow, 2005](#)). During protests, the likelihood of injuries due to crowd control measures or clashes with law enforcement is a significant concern. For instance, during the 2019-2020 protests in Chile, student groups organized first-aid stations and had medical volunteers ready to assist injured demonstrators ([Somma et al., 2020](#)). In consequences, for July Revolution educational or medical institutions of all kinds opens their doors with free treatment for all injured irrespective with their organizational identities across the capital and the country. Blood donors' and financial support contact numbers are posted.

Crisis management could include legal support for arrested participants, public relations strategies to counteract negative media coverage, or internal conflict resolution mechanisms to maintain unity within the movement ([Ganz, 2010](#)). Contact numbers for free legal support providers are posted in social media. It resembles with the use of WhatsApp during the COVID-19 pandemic to coordinate relief efforts and disseminate accurate information demonstrates the efficiency of digital tools in crisis management ([Merchant & Lurie, 2020](#)). In July movement, awareness about alternative solutions if internet crackdown is also communicated through social media. So, the hypothesis is:

***Null Hypothesis (H0)6:** Rapid information dissemination does not significantly improve crisis management effectiveness in July Movement.*

Narrative and Storytelling in Digital Communication

The GenZ leaders and members developed compelling narratives for local and international audiences. The use of storytelling and narrative techniques are to frame the movements and communicate effectively with diverse audiences across digital platforms ([Baker & Gower, 2010](#)). The protests use personal stories to resonate with and mobilize the broader public. During the Hong Kong protests, activists used personal stories shared on social media to humanize their cause and garner international support ([Chan & Lee, 2020](#)).

Crowdsourcing and Collective Intelligence

Crowdsourcing is a key tactic used by leaders to gather ideas, resources, and solutions from a broad base of participants, enhancing decision-making through collective intelligence ([Howe, 2006](#)). The protest in Bangladesh incorporates diverse perspective through crowdsourced input for street wall writing, painting and posters. Funding from across the organizations and professions uphold the movement to its utmost height through community resource utilization and collective intelligence. They are engaged with the mass public in generating innovative protest strategies. The Egyptian revolution in 2011 saw the use of crowdsourced ideas for protest strategies and locations, demonstrating the power of collective intelligence in leadership ([Aouragh & Alexander, 2011](#)).

3. Data Collection and Methodology

Primary data was collected from students who directly or indirectly participated in the July Movement 2024. Sampling frame was formed with students studying in high schools, colleges and universities across Bangladesh, and a random sampling method was used to collect data from selected high schools, colleges, and universities. Based on ten leadership and communication strategy factors, fifty questions are prepared to conduct the survey. Respondents were contacted to fill the survey form via lead contact persons of student movement from selected educational institutions. Although 2,438 students were invited to fill the Google form of the survey, only 2,120 inputs were collected between August 11 and September 10, 2024

Item responses were measured by using a five-point Likert Scale ranging from “1” to “5”, where “1” represented “Strongly Disagree” and “5” represented “Strongly Agree”. Six hypotheses are developed and tested by using PLS-SEM. This study utilizes R software to

conduct PLS-SEM that is particularly well-suited for analysing data that does not follow a normal distribution and is not subject to sample size restrictions (Willaby et al., 2015). Given that a sample size of 2,120 has been used in our study, PLS-SEM is an ideal analytical tool for exploratory studies. A two-stage SEM approach has been adopted in this study: the first stage validates the measurement model, and the second stage validates hypotheses in a structural model. Factor loading (FL), Cronbach's alpha (α), composite reliability (CR), and Average Variance Extracted (AVE) are estimated and examined for the reliability and validity of constructs in the model. Given that the reliability and validity of the model are ensured, in the second stage of SEM, the structural model is tested to validate the hypotheses proposed in this study.

4. Results and Interpretation

In the following discussion results from the statistical analyses are shown with interpretations of the results obtained:

4.1 Statistical properties of data

Statistical software R has been used to analyse data collected from 2,120 respondents. Demographic information of respondents is provided in Table 1 shows that 86.6% of respondents are 20-26 years old, 53.21% of respondents directly participated in the student movement, 35.52% of respondents are female, and higher direct participation of males (64.52%) compared to females (32.67%). Thus, the study covers both male and female students of different ages who have directly or indirectly participated the July Movement 2024.

Table 1: Demographic information of respondents

Gender	Participation		Age		
	Direct	Indirect	13-19	20-26	27+
Male	882	485	107	1203	57
Female	246	507	86	633	34
Total	1128	992	193	1836	91

The common method bias and variance inflation factor (VIF) to check the data quality to perform the PLS-SEM are tested. A post hoc Harman's single factor test of common method bias examines that the first factor does not account for more than 50% of the total variance (Podsakoff et al., 2003). The result reveals that the first factor accounts only 36.31% of the total variation, well-below the recommended highest cut-off value of 50%, and common method bias is highly unlikely to distort the result. The VIF values for collinearity in data is examined as well. Any VIF value less than 5 indicates no significant collinearity (Hair et al., 2017). All VIF values shown in Table 2 are less than 5 and there is no significant collinearity in data. Thus, the data used in this study less likely to distort any result due to common method bias and collinearity issues, and this dataset is utilized for assessment of both measurement and structural models.

4.2 Assessment of the measurement model

Validity and reliability of the constructs are examined for the measurement model. To establish the reliability of constructs, both CR and α values need to be higher than the cut-off value 0.70

for all constructs (Hair et al., 2010). Since α values of all constructs range between 0.73 and 0.85, and CR values fall between 0.84 and 0.89 (Table 2), all measures exhibit internal consistency reliability. Fornell and Larcker (1981) recommended that AVE and FL above 0.5 satisfy the conditions for convergent validity. Results in Table 2 show that all AVE values range between 0.50 and 0.62, and results in Table 3 show that all FL values fall within the range of 0.70 to 0.79. Thus, both the AVE and FL criteria are satisfied to ensure the convergent validity of constructs.

Table 2. Measurement Model

Constructs	Items	Loadings	VIF	α	CR	AVE
ARL	ARL1	0.7603	1.6778	0.8489	0.8922	0.6235
	ARL2	0.7959	1.8267			
	ARL3	0.7843	1.7490			
	ARL4	0.8072	1.9068			
	ARL5	0.7995	1.8533			
CCI	CCI1	0.7235	1.5076	0.8171	0.8724	0.5781
	CCI2	0.7870	1.7064			
	CCI3	0.8020	1.8046			
	CCI4	0.7216	1.5295			
	CCI5	0.7641	1.6308			
DAM	DAM1	0.6385	1.3854	0.7813	0.8511	0.5356
	DAM2	0.7617	1.7540			
	DAM3	0.7803	1.6863			
	DAM4	0.8065	1.8237			
	DAM5	0.6566	1.2291			
DCML	DCML1	0.6811	1.3597	0.7396	0.8275	0.4986
	DCML2	0.6664	1.2917			
	DCML3	0.7202	1.3665			
	DCML4	0.7012	1.3623			
	DCML5	0.7291	1.4183			
EAVBL	EAVBL1	0.6686	1.3583	0.7787	0.8498	0.5317
	EAVBL2	0.7452	1.5762			
	EAVBL3	0.7811	1.6298			
	EAVBL4	0.6915	1.3840			
	EAVBL5	0.7535	1.5415			

GCNL	GCNL1	0.7693	1.6047	0.8339	0.8825	0.6003
	GCNL2	0.7676	1.6886			
	GCNL3	0.7963	2.0148			
	GCNL4	0.7827	1.9010			
	GCNL5	0.7575	1.5432			
NSDC	NSDC1	0.6979	1.3844	0.7929	0.8580	0.5475
	NSDC2	0.7513	1.5489			
	NSDC3	0.7700	1.6397			
	NSDC4	0.7283	1.4852			
	NSDC5	0.7503	1.5266			
RIDCM	RIDCM1	0.7664	1.5897	0.8214	0.8749	0.5836
	RIDCM2	0.7794	1.6751			
	RIDCM3	0.8178	1.8983			
	RIDCM4	0.7218	1.5623			
	RIDCM5	0.7303	1.5180			
TATDP	TATDP1	0.7290	1.5380	0.8418	0.8879	0.6134
	TATDP2	0.7967	1.7834			
	TATDP3	0.8210	2.0145			
	TATDP4	0.7929	1.8407			
	TATDP5	0.7733	1.7056			
UHVC	UHVC1	0.7126	1.6801	0.8019	0.8633	0.5586
	UHVC2	0.7764	1.6216			
	UHVC3	0.7921	1.9331			
	UHVC4	0.7272	1.5093			
	UHVC5	0.7256	1.4798			

Note: α = Cronbach's Alpha, CR = Composite Reliability, AVE = Average Variance Extracted, ARL = Adaptive and resilient leadership, CCI = Crowdsourcing and collective intelligence, DAM = Digital activism and mobilization, DCML = Decentralized and collective leadership, EAVBL = Emotional and value-based leadership, GCNL = Global connectivity and network leadership, NSDC = Narrative and storytelling in digital communication, RIDCM = Rapid information dissemination and crisis management, TATDP = Transparency and accountability through digital platform, and UHVC = Use of hashtag and viral campaign.

The square root of AVE and correlations between constructs for discriminant validity are examined. Table 3 shows that the square root of AVE is more significant than the correlations between constructs supporting discriminant validity of constructs (Fornell and Larcker, 1981). Heterotrait-Monotrait (HTMT) correlation ratio smaller than 0.90 in Table 4 also supports

discriminant validity of all constructs ([Henseler et al., 2015](#)). Thus, the discriminant validity is supported by both the Fornell-Larcker and HTMT criteria ([Fornell and Larcker, 1981](#); [Henseler et al., 2015](#)).

Table 3. Fornell-Larcker criterion for discriminant validity

	ARL	CCI	DAM	DCML	EAVBL	GCNL	NSDC	RIDCM	TATDP	UHVC
ARL	0.7896									
CCI	0.7011	0.7603								
DAM	0.5000	0.4960	0.7319							
DCML	0.5732	0.5694	0.5265	0.7000						
EAVBL	0.6283	0.6262	0.5913	0.6269	0.7291					
GCNL	0.6536	0.6470	0.4462	0.4727	0.5649	0.7748				
NSDC	0.6078	0.5934	0.6355	0.5469	0.6531	0.5851	0.7400			
RIDCM	0.6919	0.7110	0.5276	0.5428	0.5914	0.5881	0.6134	0.7639		
TATDP	0.6770	0.7311	0.5418	0.5538	0.6138	0.5833	0.6108	0.7675	0.7832	
UHVC	0.6048	0.5907	0.5755	0.5038	0.5839	0.6012	0.6779	0.6003	0.5930	0.7474

Table 4. The HTMT ratio of correlations for discriminant validity

	ARL	CCI	DAM	DCML	EAVBL	GCNL	NSDC	RIDCM	TATDP
CCI	0.8394								
DAM	0.6062	0.6133							
DCML	0.7222	0.7301	0.6881						
EAVBL	0.7704	0.7813	0.7527	0.8247					
GCNL	0.7720	0.7789	0.5331	0.5960	0.6946				
NSDC	0.7397	0.7349	0.8024	0.7123	0.8297	0.7137			
RIDCM	0.8234	0.8658	0.6612	0.6942	0.7379	0.7024	0.7609		
TATDP	0.7996	0.8812	0.6652	0.7001	0.7564	0.6895	0.7474	0.9239	
UHVC	0.7306	0.7273	0.7187	0.6530	0.7360	0.7286	0.8473	0.7390	0.7199

4.3 Assessment of the structural model

The outcomes of the structural model are presented through standardized path coefficients (β) along with their statistical significance. To examine significance of path coefficients, bootstrap estimates of path coefficients (β) along with the bootstrap standard deviation, t-statistic, and p-values are computed from 1,000 bootstrap replications. Summary results shown in Table 5 examines whether the hypothetical path is statistically supported (statistically significant) or not. The analysis finds that only DAM \rightarrow CCI, DAM \rightarrow GCNL, DAM \rightarrow ARL, and NSDC \rightarrow ARL paths are not supported by our data analysis mimicking that the digital activism and

mobilization (DAM) does not directly affect the crowdsourcing and collective intelligence (CCI) and global connectivity and network leadership (GCNL). Similarly, DAM (digital activism and mobilization) and NSDC (narrative and storytelling in digital communication) do not directly affect the ARL (adaptive and resilient leadership). The study finds that DCML, UHVC, CCI, EAVBL, GCNL, RIDCM, and TATDP positively affect the ARL.

Table 5. Structural model results

Structural Path	Original Est. (β)	Bootstrap Est. (β)	Bootstrap SD	T-Stat.	P-VALUE	Supported
DAM → CCI	0.0486	0.0492	0.0264	1.8396	0.0735	No
DAM → EAVBL	0.1666	0.1664	0.0282	5.9125	0.0000	Yes
DAM → GCNL	-0.0052	-0.0045	0.0253	-0.2039	0.3906	No
DAM → ARL	-0.0196	-0.0193	0.0205	-0.9601	0.2515	No
DCML → CCI	0.2868	0.2867	0.0226	12.6810	0.0000	Yes
DCML → EAVBL	0.3160	0.3166	0.0247	12.7808	0.0000	Yes
DCML → GCNL	0.1544	0.1547	0.0225	6.8602	0.0000	Yes
DCML → ARL	0.1000	0.0987	0.0214	4.6775	0.0000	Yes
NSDC → CCI	0.2256	0.2250	0.0280	8.0451	0.0000	Yes
NSDC → EAVBL	0.2799	0.2786	0.0294	9.5285	0.0000	Yes
NSDC → GCNL	0.2716	0.2717	0.0297	9.1372	0.0000	Yes
NSDC → ARL	0.0454	0.0458	0.0279	1.6269	0.1062	No
UHVC → CCI	0.2654	0.2656	0.0275	9.6370	0.0000	Yes
UHVC → EAVBL	0.1393	0.1412	0.0291	4.7835	0.0000	Yes
UHVC → GCNL	0.3422	0.3415	0.0300	11.3954	0.0000	Yes
UHVC → ARL	0.0740	0.0729	0.0346	2.1359	0.0409	Yes
CCI → ARL	0.1781	0.1780	0.0325	5.4773	0.0000	Yes
EAVBL → ARL	0.1043	0.1048	0.0264	3.9434	0.0002	Yes
GCNL → ARL	0.1959	0.1951	0.0254	7.7000	0.0000	Yes
RIDCM → ARL	0.1916	0.1936	0.0306	6.2628	0.0000	Yes
TATDP → ARL	0.1052	0.1047	0.0319	3.2930	0.0018	Yes

Significant at $p < 0.05$ (two-tailed test) and the arrow sign (→) refers to the direction of the relationship.

4.3 Assessment for mediation

Direct and indirect effects are examined based on the guideline provided in [Hair et al. \(2016\)](#) to assess the mediation effects of latent variables. Results in Table 6 reveals that a full mediation of DAM is observed through the EAVBL to the ARL. Thus, digital activism and mobilization (DAM) does not contribute to adaptive and resilient leadership (ARL) directly, rather DAM influences emotional and value-based leadership (EAVBL) which in turn contributes to adaptive and resilient leadership.

Partial multiple mediation is observed both for DCML and UHVC where each of these two factors not only directly contribute to ARL, but also contributes via the other factors CCI, EAVBL, and GCNL. Thus, DCML enhances CCI, EAVBL, and GCNL, and finally contributes significantly towards ARL. Similarly, UHVC enhances CCI, EAVBL, and GCNL which in turn contributes positively to ARL.

Table 6. Mediation Analysis

Factor	Structural Path	Original Est.	Bootstrap Mean	Bootstrap SD	T Stat.	p-value	Supports	Mediation
DAM	DAM→CCI→ARL	0.0087	0.0087	0.0050	1.7393	0.0879	No	Full mediation
	DAM→EAVBL→ARL	0.0174	0.0175	0.0054	3.2235	0.0023	Yes	
	DAM→GCNL→ARL	-0.0010	-0.0009	0.0050	-0.2026	0.3907	No	
	DAM→ARL	-0.0196	-0.0193	0.0205	-0.9601	0.2515	No	
DCML	DCML→CCI→ARL	0.0511	0.0510	0.0102	5.0033	0.0000	Yes	Partial multiple mediation
	DCML→EAVBL→ARL	0.0329	0.0332	0.0089	3.7156	0.0004	Yes	
	DCML→GCNL→ARL	0.0303	0.0302	0.0061	4.9576	0.0000	Yes	
	DCML→ARL	0.1000	0.0987	0.0214	4.6775	0.0000	Yes	
NSDC	NSDC→CCI→ARL	0.0402	0.0400	0.0086	4.6530	0.0000	Yes	Full multiple mediation
	NSDC→EAVBL→ARL	0.0292	0.0292	0.0082	3.5706	0.0007	Yes	
	NSDC→GCNL→ARL	0.0532	0.0530	0.0090	5.9391	0.0000	Yes	
	NSDC→ARL	0.0454	0.0458	0.0279	1.6269	0.1062	No	
UHCV	UHVC→CCI→ARL	0.0473	0.0474	0.0105	4.4956	0.0000	Yes	Partial multiple mediation
	UHVC→EAVBL→ARL	0.0145	0.0147	0.0047	3.0901	0.0034	Yes	
	UHVC→GCNL→ARL	0.0671	0.0667	0.0109	6.1781	0.0000	Yes	
	UHVC→ARL	0.0740	0.0729	0.0346	2.1359	0.0409	Yes	

ARL = Adaptive and resilient leadership, CCI = Crowdsourcing and collective intelligence, DAM = Digital activism and mobilization, DCML = Decentralized and collective leadership, EAVBL = Emotional and value-based leadership, GCNL = Global connectivity and network leadership, NSDC = Narrative and storytelling in digital communication, RIDCM = Rapid information dissemination and crisis management, TATDP = Transparency and accountability through digital platform, and UHVC = Use of hashtag and viral campaign.

Full multiple mediation of NSDC (narrative and storytelling in digital communication) is observed as this does not directly contribute to ARL, but this contributes to CCI, EAVBL, and GCNL. Thus, the effect of NSDC is transmitted through CCI, EAVBL, and GCNL to enhance ARL. The diagram of the test result is shown in a structural equation model in figure 1.

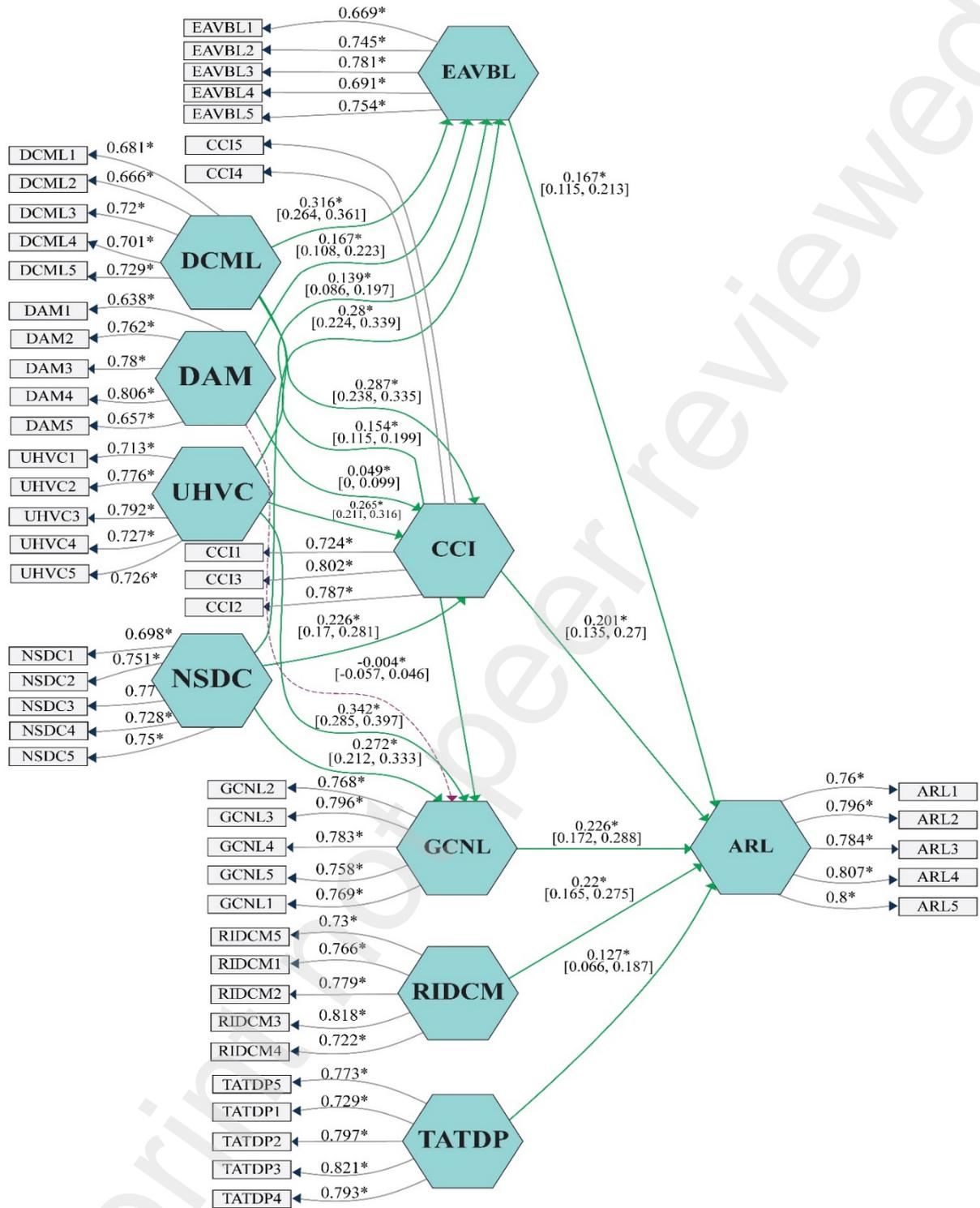


Figure 1. Results and estimated relationships of the structural model

5. Conclusion and discussion

Leadership is crucial specially when the situation is emergent and uncertain. Consistent leadership pattern of emotional appeal and values with rapid communication ensuring transparency and accountability in the network through digital tools might bring significant results; the July Revolution of GenZ is the unprecedented evidence. Organizational success conveys the effectiveness of deliberate strategies which is not always realized. But resilient and adaptive leadership with a certain goal must convince the followers to avail target outcome ensuring its actualization and preparation for the next height.

5.1 Theoretical Implications

Contingency theory states that organisations should adapt their structure and strategies to internal and external environment (context) in order to survive or improve their performance. It says that here is no single best organisational structure and management style, and contextual factors determine the appropriate organisational structure and management style ([Tosi & Slocum, 1984](#); [Donaldson, 2001](#)). GenZ's leadership the adaptive and resilient organizational structure which is one of the characteristics of contingencies during the revolution. Unlike transactional leadership its motivation is not oriented to any rewards or benefits or punishment. The genZs were fearless and ready to sacrifice of millions. Likewise, creating ideas and perspective for innovation and problem-solving transformational leadership is also surpassed by GenZs'. Their strategic goals to reach the beyond breaking the current obsolete system what confirms the visionary leadership. Also, the essence of strategic leadership involves the capacity to learn, the capacity to change, and managerial wisdom ([Boal & Hooijberg, 2000](#)) vigorously shaped and sharpened the movement in different stages of the revolution.

5.2 Practical Implications

Some managerial implications are found from this study. Adaptive and Resilience- the criteria are crucial for success of strategic planning of the leaders. To achieve the visionary plan leaders should embrace synergies with innovative solutions and move forwards. Situation could be difficult, same will be the adaptive and resilient strategy in the real-life scenario proved by GenZ leadership. Strategy based on information and communication technology could bring new projection to upheaval organizational mission. This July revolution showed strategic leadership grounded with information technology could turn the momentum of any target. At the beginning of 4.0 industrial revolution, apart from all leadership phenomenon, any organization must realize the adoption of technology in each of the phased of strategic planning process; for business organization or for the state.

Emergent strategies are always realized ([Mintzberg & McGugh, 1985](#)). GenZ's strategies were mostly emergent based on the crisis faced to continue the movement. It indicates that leadership must be prompt with adhered policies to respond immediately.

6.3 Limitation and future research

The questionnaire used in English. Assurance is difficult to make about few students from Bangla Medium Schools understand the concept properly to reply. Though the results show valid construct to develop the model, sample size cannot be justified.

Leadership Theories and its application through dynamic use of information technology should be explored. Decentralized decision making to achieve the greater value for the corporate level

could be under light to investigate new ways of communication and motivation not only for followers but also for the stakeholders.

Nobel laureate and chief adviser to the interim Bangladesh government Muhammad Yunus admitted the revolution as ‘amazingly and meticulously planned and did not happen suddenly. It is very well designed and the leadership pattern; people do not know who are the leaders. They are not one, they are many’ (DeccanHerald, 2024 & WION, 2024). This certainly confirms the significance of leadership factors in the planning process. Thus, studies of Change management through GenZ’s leadership strategies might bring new insights in the leadership and managerial phenomenon.

Declaration of interest

Nothing to declare

Funding Source

This research was supported by Relight Research, Dhaka, Bangladesh.

Declaration of generative AI and AI-assisted technologies in the writing process

During the preparation of this work, AI service is used in order to develop the hypotheses and questionnaire preparation. After using this tool/service, the author reviewed and edited the content as needed and takes full responsibility for the content of the published article. For the articles collection, Google Scholar, Research Gate and SCOPUS are used.

Reference

- Acharya, A. (2024). Influence of Youth Engagement on Nepal's Political Evolution: An Analysis of Emerging Youth-Led Movements. *Interdisciplinary Journal of Management and Social Sciences*, 5(2), 1-13, <https://doi.org/10.3126/ijmss.v5i2.69438>.
- Alam, S. M. S. (1991). Language as political articulation: East Bengal in 1952, *Journal of Contemporary Asia*, 21(4), 469-487, <https://doi.org/10.1080/00472339180000311>.
- Alexander, A., & Aouragh, M. (2011). The Egyptian Experience: Sense and Nonsense of the Internet Revolution. *International Journal of Communication*, 5, 1344-1358.
- Anderson, T. (1997). *The Movement and the Sixties: Protest in America from Greensboro to Wounded Knee*. Oxford University Press.
- Arafa, M., & Armstrong, C. (2016). "Facebook to Mobilize, Twitter to Coordinate Protests, and YouTube to Tell the World": New Media, Cyberactivism, and the Arab Spring. *Journal of Global Initiatives: Policy, Pedagogy, Perspective*, 10(1), 6, link <https://digitalcommons.kennesaw.edu/jgi/vol10/iss1/6/>, last access 22/112024.
- Azim, F. & Zaman, T. (2024). Awaiting a new dawn in Bangladesh, *Inter-Asia Cultural Studies*, 1-11, <https://doi.org/10.1080/14649373.2024.2407264>.
- Afrin, M. (2024). Perceiving Protest Through Memes: Multidimensional Influence of Memes in the Dynamic of Student Protest in Bangladeshi Context: A Thematic Analysis and Survey. (2024). *Social Science and Humanities Journal (SSHJ)*, 8(08), 4675-4680. <https://doi.org/10.18535/sshj.v8i08.1272>.
- Baker, R. T., & Gower, K. (2010). Strategic application of storytelling in organizations: Toward effective communication in a diverse world. *Journal of Business Communication*, 47(3), 295-312.

- [Barbuto, J. E., & Burbach, M. E. \(2006\). The emotional intelligence of transformational leaders: A field study of elected officials. *Journal of Social Psychology*, 146\(1\), 51-64.](#)
- Bakhit, M., (2023), A Revolution from the centre: Class, Digital Cultures, and the 2018-2022 Sudan uprising, Digital Technologies, Elections and Campaigns in Africa, Routledge, 17,
<https://www.taylorfrancis.com/chapters/edit/10.4324/9781003429081-16/revolution-centre-mohamed-bakhit>, last access 14/11/2024.
- Bass, B. M., & Riggio, R. E. (2006). *Transformational Leadership*. Lawrence Erlbaum Associates.
- Bennett, W. L., & Segerberg, A. (2012). The logic of connective action: Digital media and the personalization of contentious politics. *Information, Communication & Society*, 15(5), 739-768, DOI: 10.1017/CBO9781139198752.
- Bennis, W. (1989). *On becoming a leader*. Addison-Wesley,
<https://doi.org/10.1080/00131729009335565>.
- Boal, K., & Hooijberg, R. (2000). Strategic Leadership: Moving on. *The Leadership Quarterly*, 11, 515-549. [https://doi.org/10.1016/S1048-9843\(00\)00057-6](https://doi.org/10.1016/S1048-9843(00)00057-6),
<https://www.sciencedirect.com/science/article/pii/S1048984300000576>.
- Breuer, A., Landman, T., & Farquhar, D. (2015). Social media and protest mobilization: Evidence from the Tunisian revolution. *Democratization*, 22(4), 764-792,
<https://doi.org/10.1080/13510347.2014.885505>.
- Bruns, A., & Burgess, J. E. (2011). The use of Twitter hashtags in the formation of ad hoc publics. *Proceedings of the 6th European Consortium for Political Research General Conference*.
- Burns, J. M. (1978). *Leadership*. Harper & Row, <https://psycnet.apa.org/record/1980-03173-000>
- Carson, C. (2003). *A Call to Conscience: The Landmark Speeches of Dr. Martin Luther King, Jr.* Grand Central Publishing.
- Castells, M. (2010). *The Rise of the Network Society (2nd ed.)*. Wiley-Blackwell.
- Castells, M. (2012). *Networks of Outrage and Hope: Social Movements in the Internet Age*. Polity Press.
- Chan, J. M., & Lee, F. L. F. (2020). *Media and protest logics in the digital era: The Umbrella Movement in Hong Kong*. Oxford University Press.
- Christiansen, S. "5. From Student Activists to Muktibahini: Students, Mass Violence and the Bangladesh Liberation War". *Genocide and Mass Violence in Asia: An Introductory Reader*, edited by Frank Jacob, Berlin, Boston: De Gruyter Oldenbourg, 2019, 78-98. <https://doi.org/10.1515/9783110659054-005>.
- Cleaver, H. (1998). The Zapatista effect: The internet and the rise of an alternative political fabric. *Journal of International Affairs*, 51(2), 621-640.
- Cheng, E. W., Lui, E., & Fu, K. (2024). The power of digital activism for transnational advocacy: Leadership, engagement, and affordance. *New Media & Society*, 26(11), 6416-6439. <https://doi.org/10.1177/14614448231155376>.
- Christens, B. D., Gupta, J., & Speer, P. W. (2021). Community organizing: Studying the development and exercise of grassroots power. *Journal of Community Psychology*, 49(8), 3001-3016. <https://doi.org/10.1002/jcop.22700>.
- Cox, J. M. (2017). The source of a movement: Making the case for social media as an informational source using Black Lives Matter. *Ethnic and Racial Studies*, 40(11), 1847-1854. <https://doi.org/10.1080/01419870.2017.1334935>.
- Donaldson, L. (2001). *The Contingency Theory of Organizations*. Sage Publications, Thousand Oaks, California.

- Della Porta, D., & Diani, M. (2006). *Social movements: An introduction (2nd ed.)*. Wiley-Blackwell.
- Della Porta, D., & Tarrow, S. (2005). *Transnational protest and global activism*. Rowman & Littlefield.
- Dinh, J. E., Lord, R. G., Gardner, W. L., Meuser, J. D., Liden, R. C., & Hu, J. (2014). Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. *The Leadership Quarterly*, 25(1), 36-62, <https://doi.org/10.1016/j.leaqua.2013.11.005>
- Dobbs, K. L. (2021). "Burning embers: youth activism and the hope for democracy in Tunisia." MENA Politics Newsletter 4(2). <https://apsamena.org/mena-politics-newsletter/mena-politics-newsletter-42-fall-2021/>
- Donoso, S. (2013). Dynamics of Change in Chile: Explaining the Emergence of the 2006 Pingüino Movement. *Journal of Latin American Studies*, 45(1), 1-29, DOI: <https://doi.org/10.1017/S0022216X12001228>.
- Donoso, S., Pavlic, R. D., Belén Cumsille R. (2023), Social policy expansion from below? The case of Chile's student movement and free tuition higher education, *World Development*, 167, 106213, ISSN 0305-750X, <https://doi.org/10.1016/j.worlddev.2023.106213>.
- El-Ghobashy, M. (2012). The Praxis of the Egyptian Revolution. *Middle East Report*, 41(258), 2-13, DOI: [10.2307/j.ctt16gh793.13](https://doi.org/10.2307/j.ctt16gh793.13).
- El-Khawas, Mohamed. (2012). Tunisia's Jasmine Revolution: Causes and Impact. *Mediterranean Quarterly*. 23. 1-23. 10.1215/10474552-1895357.
- Eisenbeiss, S. A. (2012). Re-thinking ethical leadership: An interdisciplinary integrative approach. *The Leadership Quarterly*, 23(5), 791-808, <https://doi.org/10.1016/j.leaqua.2012.03.001>.
- Fernando, J. (2023). The citizen's uprising in Sri Lanka: A watershed moment against racial capitalism. *Human Geography*, 16(2), 181-186. <https://doi.org/10.1177/19427786221123004>.
- Fornell, C., & Larcker, D. F. (1981). Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. *Journal of Marketing Research*, 18, 382-388. <http://dx.doi.org/10.2307/3150980>
- Ganz, M. (2010). Leading change: Leadership, organization, and social movements. In N. Nohria & R. Khurana (Eds.), *Handbook of leadership theory and practice* (pp. 527-568). Harvard Business Press, <https://www.hks.harvard.edu/publications/leading-change-leadership-organization-and-social-movements>.
- Ghosh, S. (2024). Conceptualizing student movements in Bangladesh post-2013: a qualitative and comparative case study of the Quota Reform Movement and the Road Safety Movement. *Social Identities*. 29. 1-21. 10.1080/13504630.2024.2320093.
- Gizouli, M. (2019). Class Dynamics, Dissemination of the of the Sudanese Uprising-*Noria Research*, Middle East and North Africa Program.
- Hair, Joseph & Black, William & Babin, Barry & Anderson, Rolph. (2010). *Multivariate Data Analysis: A Global Perspective*.
- Hair Jr., J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Thousand Oaks, CA: Sage Publications.
- Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2017) *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. 2nd Edition, Sage Publications Inc., Thousand Oaks, CA.

- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>.
- Hall, S. (2008). *American Patriotism, American Protest: Social Movements Since the Sixties*. University of Pennsylvania Press.
- Handique, V. (2020). Not just regime change: women and protests movement in Sudan, *NIAS Quarterly on Contemporary World Affairs*, 2 (2 & 3), 1-12, https://globalpolitics.in/pdf_file/articles/vaishaliwomen.pdf, last access 14/11/2024.
- Hasan, M., Biswas, A. & Ahsan, A. (2020). The Role of Facebook in Quota Reform Movement of Bangladesh, *Global Journal of Human-Social Science: A Arts and Humanities-Psychology*, 20 (14), 36-48.
- Heifetz, R. A. (1994). *Leadership Without Easy Answers*. Harvard University Press.
- Howe, J. (2006). The rise of crowdsourcing. *Wired Magazine*, 14(6), 1-4, <https://cir.nii.ac.jp/crid/1573387449825400704>, last access 09/11/2024.
- Howard, P. N., & Hussain, M. M. (2013). *Democracy's Fourth Wave? Digital Media and the Arab Spring*. Oxford University Press, <https://deepblue.lib.umich.edu/handle/2027.42/117564>, last access 09/11/2024.
- Hussain, M. (2012), Students as the pressure group in Pakistan's Politics, 1947-1958, *Pakistan Journal of History and Culture*, 33 (1), 157-172. Link http://www.nihcr.edu.pk/Latest_English_Journal/7.%20Students%20as%20the%20Pressure%20Group,%20MahboobHussain.pdf, last access 13/11/2024.
- Jackson, S. J., Bailey, M., & Welles, B. F. (2020). *#HashtagActivism: Networks of Race and Gender Justice*. MIT Press.
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, 53(1), 59-68. <https://doi.org/10.1016/j.bushor.2009.09.003>.
- Kimberly B. B., & R. Hoojiberg (2000), Strategic Leadership Research: Moving on, *The Leadership Quarterly*, 11(4), 515-549. [https://doi.org/10.1016/S1048-9843\(00\)00057-6](https://doi.org/10.1016/S1048-9843(00)00057-6).
- Khan, F. (2022). Social Movement Partyism in Authoritarian Regimes: A Case Study of Student Movement against Field Martial Ayub Khan in Pakistan (1968-69). *PAKISTAN LANGUAGES AND HUMANITIES REVIEW*. 6. 10.47205/plhr.2022(6-II)104.
- Lee, F. L. F., Liang, H., Cheng, E. W., Tang, G. K. Y., & Yuen, S. (2021). Affordances, movement dynamics, and a centralized digital communication platform in a networked movement. *Information, Communication & Society*, 25(12), 1699–1716. <https://doi.org/10.1080/1369118X.2021.1877772>.
- Leong, C., Faik, I., Tan, F. T., Tan, B., & Khoo, Y. H. (2020). Digital organizing of a global social movement: From connective to collective action. *Information and organization*, 30(4), 100324, <https://doi.org/10.1016/j.infoandorg.2020.100324>.
- Liveris, A. (2023), Why Today's Leaders need to Be Perpetual Learners, *Harvard Business Review*, HBR.org, <https://hbr.org/2023/08/why-todays-leaders-need-to-be-perpetual-learners>, Last Access 23/11/2024.
- Madanchian, M., Taherdoost, H., Vincenti, M. & Mohammed, N. (2024), Transforming Leadership Practices through Artificial Intelligence, *Procedia Computer Science*, 235, 2101-2111, <https://doi.org/10.1016/j.procs.2024.04.199>.
- Maniruzzaman, T. (1980), *The Bangladesh Revolution and its aftermath*. Dhaka: Bangladesh Books International Limited.
- Maxwell, J. C. (1998). *The 21 irrefutable laws of leadership: Follow them and people will follow you*. Thomas Nelson.

- Merchant, R.M. and Lurie, N. (2020) The Mental Health Consequences of COVID-19 and Physical Distancing: The Need for Prevention and Early Intervention. *JAMA Internal Medicine*, 180, 817-818. <https://doi.org/10.1001/jamainternmed.2020.1562>.
- Mintzberg, H & McGugh, A. (1985), Emergent and Deliberate Strategies, *Administrative Science Quarterly* 30(2), 160-197.
- Miao, Q., Newman, A., Yu, J., & Xu, L. (2013). The relationship between ethical leadership and unethical pro-organizational behavior: Linear or curvilinear effects? *Journal of Business Ethics*, 116(3), 641-653. <https://doi.org/10.1007/s10551-012-1504-2>.
- Moore, M. (1993). The ideological origins of the JVP (The Peoples' Liberation Front) in Sri Lanka. *Modern Asian Studies*, 27(3), 593-642. <https://doi.org/10.1017/S0026749X00016423>.
- Morris, A. D. (1984). *The origins of the civil rights movement: Black communities organizing for change*. Free Press.
- Nasrin, S., & Rahman, M. M. (2019). Politicization of student politics in Bangladesh: Historical experiences and contemporary trends. *Journal of Social Science Studies*, 6(2), 17-42, <http://dx.doi.org/10.5296/jsss.v6i2.14385>.
- Obeyesekere, G. (1974). Some comments on the Social Backgrounds of the April 1971 Insurgency in Sri Lanka (Ceylon), *Journal of Asia Studies*, 33(3), 367-384, <http://doi.org/10.2307/2052937>.
- Pfeffer, J. (2010). *Power: Why Some People Have It and Others Don't*. HarperCollins.
- Philips, C. (2024), Digital Communication and the Rise of Online Activism, *Journal of Communication*, 5(3), 31-44, DOI:[10.47941/jcomm.1983](https://doi.org/10.47941/jcomm.1983).
- Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon*, 9(5), 1-6. <https://doi.org/10.1108/10748120110424843>.
- Podsakoff, Philip & MacKenzie, Scott & Lee, Jeong-Yeon & Podsakoff, Nathan. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *The Journal of applied psychology*. 88. 879-903. 10.1037/0021-9010.88.5.879.
- Rainer, T. S., & Rainer, J. S. (2018). *The Millennials: Connecting to America's Largest Generation*. B&H Publishing Group.
- Rickford, R. (2016). Black Lives Matter: Toward a modern practice of mass struggle. *New Labor Forum*, 25(1), 34-42. <https://doi.org/10.1177/1095796015620171>.
- Saka, E. (2017). Tracking digital emergences in the aftermath of Gezi Park protests. *Research and Policy on Turkey*, 2(1), 62-75. DOI:[10.1080/23760818.2016.1272268](https://doi.org/10.1080/23760818.2016.1272268).
- Seemiller, C., & Grace, M. (2016). *Generation Z Goes to College*. Jossey-Bass.
- Seidman, M. (2004). *The Imaginary Revolution: Parisian Students and Workers in 1968*. Berghahn Books.
- Shifman, L. (2014). *Memes in Digital Culture*. The MIT Press. <http://www.jstor.org/stable/j.ctt14bs14s>.
- Sharp, G. (2005). Waging nonviolent struggle. *Porter Sargent, Boston*, 40.
- Singh, K., Bhargavi, D. H. (2024). UNVEILING THE INFLUENCE OF SOCIAL MEDIA ON SOCIAL MOVEMENTS: ANALYZATION, MOBILIZATION, ORGANIZATION, AND OUTCOMES THROUGH CASE STUDIES. *Sampreshan*, ISSN:2347-2979 UGC CARE Group 1, 17(2), 505-604. <https://doi.org/10.8476/sampreshan.v17i2.192>.
- Smith, R.G. (2024). Introduction: Chilean Students' Opposition to the Pinochet Regime (1973-1990). In: *Student Resistance to Dictatorship in Chile, 1973-1990*. Palgrave Studies in the History of Social Movements. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-031-64384-2_1.

- Snow, D. A., Soule, S. A., Kriesi, H. (2004), *The Blackwell Companion of Social Movement*, Blackwell Publishing. Last access 22/11/2024 link <https://voidnetwork.gr/wp-content/uploads/2016/09/The-Blackwell-Companion-to-Social-Movements-Edited-by-David-A.-Snow-Sarah-A.-Soule-and-Hanspeter-Kriesi.pdf#page=186>.
- Somma, N. M., Bargsted, M. A., Disi Pavlic, R., & Medel, R. M. (2020). No water in the oasis: The Chilean Spring of 2019–2020. *Social Movements Studies*, 19(5-6), 551-558. <https://doi.org/10.1080/14742837.2020.1727737>.
- Tarrow, S. (2005). *The New Transnational Activism*. Cambridge University Press.
- Tilly, C., & Wood, L. J. (2009). *Social movements 1768-2008*. Paradigm Publishers. DOI: 10.4324/9780429297632
- Tadros, M. (2012). The Pulse of the Arab Revolt. *Current History*, 111(742), 323-328. DOI:[10.1111/j.1759-5436.2012.00285.x](https://doi.org/10.1111/j.1759-5436.2012.00285.x)
- Ta'amneh, I. & Al-Ghazo, A. (2021). The Importance of Using Hashtags on Raising Awareness about Social Issues. *International Journal of Learning and Development*. 11(4), 10-24. DOI: <https://doi.org/10.5296/ijld.v11i4.19139>.
- Tanjeem, N., Fatima, R.E. (2023). The 2018 Road Safety Protest in Bangladesh: How a Student Crowd Challenged (or Could not Challenge) the Repressive State. In: Rivers, I., Lovin, C.L. (eds) *Young People Shaping Democratic Politics*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-031-29378-8_4.
- Taylor, K.-Y. (2016). *From #BlackLivesMatter to Black liberation*. Haymarket Books.
- Tosi, H.L., Slocum, J.W., (1984). Contingency theory: some suggested directions. *J. Manag.* 10(1), 9–26.
- Tufekci, Z. (2017). *Twitter and tear gas: The power and fragility of networked protest*. Yale University Press.
- Valenzuela, S. (2019). Unpacking the use of social media for protest behavior: The roles of information, opinion expression, and activism. *American Behavioral Scientist*, 57(7), 920-942. <https://doi.org/10.1177/0002764213479375> .
- Willaby, H. W., Costa, D.S.J., Burns, B. D., MacCann, C., & Roberts, R. D. (2015), Testing complex models with small sample sizes: A historical overview and empirical demonstration of what Partial Least Squares (PLS) can offer differential psychology, *Personality and Individual Differences*, 84, 73-78, ISSN 0191-8869, <https://doi.org/10.1016/j.paid.2014.09.008> .
- Wang, T. Y. (2023). Hong Kong and the 2019 Anti-Extradition Bill Movement. *Journal of Asian and African Studies*, 58(1), 3-7. <https://doi.org/10.1177/00219096221124983> <https://doi.org/10.1163/18739865-01003003> .
- Xinyue, D. (2023). Social Media as a Tool for Political Mobilization: A case study of the 2020 Hongkong Portests, *Journal of Public Representative and Society Provision*, 3(1), 10-20, <https://doi.org/10.55885/jprsp.v3i1.199> .

Websites of News

- Deccan Herald (2024), <https://www.deccanherald.com/world/bangladeshs-chief-advisor-yunus-introduces-brains-that-meticulously-designed-hasinas-ouster-3209862> ; Last access 02/11/2024.
- WION (2024), <https://www.wionews.com/world/yunus-introduces-brains-behind-bangladesh-revolution-admits-it-was-meticulously-planned-762419> Last access 02/11/2024.