

Building Employee Resilience through e-Training: A Case study of National Hydroelectric Power Corporation's Unit

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Abstract

Organizations have been experiencing VUCA situations due to swift technological changes, business competitions, and the COVID-19 pandemic and now its second wave. In order to thrive in these situations, organizations ought to prepare their workforce ready with enhanced resilience. Resilience is the capability of employees to recover quickly from a disruption situations, bounce-back ability and flexibility shown by the employees with their enhanced capabilities and desired work behavior. In order to build resilience and desired work behavior in employees, organizations ought to train their employees. The latest management tool to train the employees by adapting to electronic training method in disruption situations. This paper analyzed e-Training adapted in one of the power plants of National Hydroelectric Power Corporation located in Chamba region Himachal Pradesh. Through a case based approach, information was collected from organizations. The results showed a positive effect upon the employees participating in the various e-Training programs, trainees imbibed desired work behavior and enhanced resiliency. This study showed that the learning through e-Training method is more flexible and cost-effective in contemporary business situations.

Keywords: COVID-19, e-Training, Human Resource Development, Resilience, VUCA

1. Introduction

Volatility, Uncertainty, Complexity, Ambiguity (VUCA) situations arise due to continuous technological changes, advancements and pandemics in the society. VUCA situation shows the unpredictable nature of the world like the situation of COVID 19 pandemic and its second wave in which we are in right now. The employees need to prepare themselves with enhanced resiliency to adapt to latest technology and to face pandemic and disruption situations. This is possible only when they are well trained with the support of organizations.

Electronic Training (e-Training) is digitalized method to impart training on technical knowhow, skills and attitudes & behavioral modification; thereby enhance the employees' existing knowledge and flexibility levels for accomplishing targets successfully. With this employees will adapt to socio-economic and technical changes, new advancements and give their best for organization's growth and survival. It also contributes in greening organization. The e-Training is a modern approach to impart training to employees using the internet technology.

HRD through various e-Training programs develops the workforces' functional, technical, soft skills and

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desired behavior to face the challenges. When employees face difficulties and overcome with knowledge and flexibility along with team spirit, the relationships among employees after achieving success will be very much stronger than before (Bardoel et al., 2014). The e-Training is online training method to increase the technical capabilities and enhanced values of human resources. The impact of e-Training is quite effective when employees participate in training programs wholeheartedly with empowered spirit. The e-Training plays a vital role to cope with the turbulence situations by the competitive spirit and high employee morale in employees.

The word 'Resilience' was originally used in Werner's work with Hawaiian children, who were orphaned and most of the time they were hungry. In his study he revealed that children who survived are with positive attitudes. According to authors, to acquire resiliency in oneself, one needs to change the adverse situations with positive attitude. In order to develop through facing challenges and adversity, one should possess the quality of resiliency. Resilience can be observed in accordance with existing situation and role of human beings, their family members and society where they live and organizations where they work. The process of adapting suitably in the face of adversity, shock, disaster, pressures or significant sources of stress - such as family problems, serious health problems or workplace and financial stressors (The American Psychological Association, 2017).

Resilience is the capacity to recover quickly from difficulties, bounce-backability and flexibility. Learning the art of becoming resilient at enhanced levels will provide the success to any business entity (Sharma&Sharma,2020). Resiliency in employees indicates the quality and their capability to deal with turbulences and overcome successfully (Jackson et al., 2007). The employees' resilience is the employees' competencies acquired through organization's financial support with which employees continuously adapt and develop at work through training, even during disruptions and challenging circumstances (Nguyen et al., 2016).

1.1 National Hydroelectric Power Corporation Limited

(NHPC Limited) is a largest Hydroelectric Power Corporation in India, with capabilities to undertake all the activities from conceptualization to commissioning in relation to setting up of hydroelectric power projects. NHPC Limited has also diversified in the fields of Solar & Wind power. NHPC Limited presently has an installation base of 7071.2 MW from 24 power stations, 5774 MW (6 projects are under construction stage), 10382 MW (16 Projects are under clearance stage), 1628MW (4 projects are in Survey & Investigation stage).

Hydroelectric Power Stations extracts the energy of falling water to generate power. The major components of a Hydroelectric Power Stations are Dam/Barrage, Headrace tunnels/channels, Penstock, Underground and surface power house, Tailrace channel or tailrace tunnel. The sizes of Hydroelectric Power Stations with installed capacity up to 100 KW (Micro), up to 101KW to 2 MW (Mini), from 2 MW up to 25 MW (Small) and >25 MW(Major). Machinery used in Hydroelectric Power Stations: Turbines – Pelton/Francis/Kaplan-make & Propeller, Tubular and Generators & Synchronous Generators, Turbine Governing System, Excitation System & Control/SCADA operating system; Switch Gear System, Gas Insulated Switchgear to connect/disconnect with Grids.

Hydroelectric Power Stations are located very far off places, hilly areas and very hard locations, where weather conditions are adverse and extreme. Travelling in peak winter period is not at all possible from the locations. In order to acquire training, physically they have to travel a long distances, thereby causing vehicular pollution, creates adverse impact on environment. In Hydroelectric Power Stations technical staff required to operate Power Stations in Executive Cadres: Engineers in Technical and high ranks with Civil/Mechanical/Electrical/Electronics & Communications/IT background and in Executives in non-technical Cadres: Geology, Geophysics, HR, Doctors(MBBS), Safety, Environment, Finance, Accounts, Law, PR and in Non-Executive Cadres (technical/non- technical): Surveyors, Electrician, Fitter, Machinist, Crane Operator, Gate Operator, Rigger, Welder, Grind-man, DG Operator, Fireman, Mechanic, etc. The technical/non-technical workforces are assets for Hydroelectric Power Stations; they work in shift system round-the-clock and their presence is very much required. In order to make this possible without sending them on very long distances for training programs, it is very much required and convenient to have training through e-Training method at their work places, which is very much convenient and advantageous. In the past manual mode was used to operate Hydroelectric Power Stations and at present, the machines are operated on semi-auto mode & auto mode through software programs & SCADA. The training through electronic mode is required for the workforces on functional, technical - machinery up-gradations, Turbine Governing System, Rotor, Generators, Excitation System, to run and stop units as per power requirement & Control/SCADA operating system, etc. and on General Safety, Electricity Safety & Basic Fire Safety, yoga, health and lifestyle, etc.

2. Literature Review

Apart from technological interventions, pandemics and natural disasters are making severe impact on business world. To stop spreading COVID-19, Governments across the globe promoted precautionary measures like social distancing, quarantine, work from home, and lockdowns in-country (Mustafa, 2020). COVID-19 was declared as pandemic in March, 2020 by World Health Organization (Kotian et.al, 2020). The battle against COVID-19 pandemic second wave is going on now and has become a challenge in India. To prepare employees as knowledgeable and resilient employees to face unpredictable VUCA situations, organizations need to train by adapting traditional or e-Training methods, whichever suitable. But, present times clearly indicate traditional methods not at all feasible. In the prevailing circumstances, to economize organization's funds and for easier method, wherever employee stays in office/home, he/she can easily attend to e-Training through virtual webinars on Zoom, Google-meet, etc., through his/her laptop, desktop computer or else smart-phone.

The employees love learning and the process of learning and exhibits enthusiasm in acquiring new knowledge. They express satisfaction for learning, which can only makes the employees as expertise. All these result in becoming employees as efficient and effective (Bereiter and Scardamalia, 1992; Stolovitch and Keeps, 1992). Learning at work means acquiring knowledge from scheduled training programs attended by employees; and learning in work means observing, questioning while working in organization, solving problems, motivating, guiding, and working in teams by them. The opportunity, which is available for learning outside the organization, is known as learning outside work (Sambrook, 2005). A learning organization has emerged with futuristic need to develop human competence that can help an organization to thrive and survive in VUCA situations. The organizational leaders must create an environment, which supports the employees to enhance their inner abilities and employees' welfare measures. This can ultimately lead to team spirit and flexibility through which they can easily bounce back from impacts due to VUCA (Tonkin et al., 2018).

Every organization has to make its workforce resilient in order to face VUCA situations and to overcome the situation successfully. When the workforce exhibits resiliency during VUCA definitely achieves success (King et al., 2015). Keeping records of flexibilities shown by employees both inside and outside of organisation in VUCA times helps to know adaptability levels of employees and to know individual, organizational and societal factors that distinguish workforce who demonstrate resilience and other desired qualities to adapt to changes (Britt et al., 2016). The organizations, those focusing on enhancing knowledge and flexibility indicates that they are preparing employees to handle uncertainty more successfully by adapting to change speedily and managing stress more effectively (Britt et al., 2016).

In NHPC's selected power plant in Chamba region, Himachal Pradesh, HRD personnel played very important role in conducting various e-Training programs on functional/technical, behavioral and leadership development. HRD has organized virtual training programs on yoga, health and lifestyle programs in accordance with the changing scenario to enable organizations to keep ready their workforce with enhanced resilience and competitiveness to thrive in VUCA situations due to technological changes and pandemics.

The competitiveness of employees will be determined as per human resources' flexibility, adaptability, imbibing the knowledge through training and to scan environment and competition in the market (Festing and Eidems, 2011). One of the main purposes of imparting training programs for employees is to enhance flexibilities of employees at individual levels to develop their inner abilities and for organizational excellence and survival. Organizations need to prepare and get their workforce ever-ready with enhanced knowledge, flexibility and competency by imparting suitable training to cope with the changing environment and contribute for the organizational efficiency (Rao, 2013). Providing training to workforce is an important issue for any organisation as it increases employees' inner abilities, performance levels and effectiveness for achieving organisation's goals, productivity and development; organisations need to have suitable training policy to provide training to its employees for increasing their skills (Ameen & Baharom, 2019).

The strong relationship exists between training and development; to achieve the targets, organizations need to keep on allocating budget for imparting training accordingly (Sudhakar & Basariya, 2017). Imparting training to employees results in skills development, facilitates adaptability to change and establish new norms by building 'technical skills', 'positive mindset', 'alignment with objectives of change' & 'support of leaders influencing workforce'. (Maheshwari & Vohra, 2018). The training is positively related to employees' performance & competitive spirit. In order to build a rightful and logical mechanism, it is needed to select the right employees for right training programs and accordingly management should evaluate performance of workforce after imparting training (Padmasiri et al., 2018). Balanced and committed workforce in organization is possible through by effective training programs (Owoyemi et al., 2011).

One of the main purposes of imparting e-training programs for employees is to increase flexibilities of employees at individual levels to develop their inner abilities and for organizational excellence and survival.

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Digital technologies are vital for mixed training methods and where organizations are located in different geographical areas and for enhancing human resource development (Gegenfurtner *et al.*, 2020; Thalhammer, 2014).

Resilience is a “common phenomenon arising from ordinary human adaptive processes”(Masten, 2001). Resilience is the process of positive adaptation with respect to turbulent situations of routine stressors and common life changes (Gillham *et al.*, 2013). Southwick *et al.*(2014) proposed that “resilience is not only bouncing back from adverse situations, but also moving forward with dedicated team work by keeping in mind learning aspect from experiences of adverse situations faced”. Na’swall *et al.*, (2013); Nguyen *et al.*, (2016) defined resilience in employees as “employee capability, facilitated and supported by the organization, to utilize resources to continually adapt and flourish at work, even when faced with challenging circumstances”. During turbulence situations due to rapid technological changes, employees having resiliency shows positive thinking (Cooper *et al.*, 2013) and positive attitude (Youssef & Luthans, 2007). The workforce who imbibes resiliency, quickly bounce-back from failures than non-resilient workforce and are more adaptive and responsive to organizational changes. The workforce with resiliency exhibits positive attitude, adaptive and responsible nature to organizational changes and its survival (Shin *et al.*, 2012), it will surely contribute in achieving the success to any firm (Sharma & Sharma, 2020). The employees’ resiliency of every firm needs to be studied and enhanced for survival in the VUCA (Robertson *et al.*, 2015). The resiliency indicates ability to face and thrive in turbulent situations, adjust according to situation with resiliency and scan the environment/anticipate (Gligor *et al.*, 2019). Resiliency can be measured through group learning, content learning, group-cohesiveness, communication with group(s) and exchange of ideas, group composition, target design, group norms, efficacy of individual group members and perceived efficiency for collective group action (Sharma & Sharma, 2020). The affects of resilience levels are based on participants educational background, age and gender (Wang *et al.*, 2013). Creating individual and organizational resilience is very important and employees’ well-being is important for their motivation and to get success in turbulence times(Williams & Shepherd, 2016). Organizations engage right manpower and gets best out of them and achieving success during difficult times. Generally some people pass through difficulties very easily, but some feel very difficult due to not having positive attitudes. The team spirit is very important to counter turbulence situations. The idea of employee/team resilience starts to emerge while countering turbulent situations. Employees are very important human resource assets for any organization for survival of organization. Resilient employees imbibed with positive attitudes show flexible nature in their real life and sociable nature. The measuring of resilience is to know employee’s behaviour and to know organisational enabling strength (Nguyen *et al.*, 2016). The resiliency at individual level and organizational level are reciprocally related.

3. Research Methodology: Positivity. Cross sectional survey.

Data collected through telephonic conversations/personal observation with 140 participants those who have attended e-Training programs during the last financial year on various subjects, viz., technical, functional, behavioral and leadership development, yoga, health and lifestyle. To conduct the study secondary data was collected from the National Hydro Power Corporation’s Chamba Unit of Himachal Pradesh. The e-Training programs conducted from April,2020 to March,2021 at one of Unit (Total manpower:590 (210 (Executives/Non-Executives-regular) & 380 (contractors’ workforce) in the Chamba region Himachal Pradesh (see Table 1).

4. Objectives of the Study

To know enhanced employee resilience to thrive in COVID-19 pandemic second wave and adaptability to technological changes smoothly in VUCA world through development of resilience in employees. We intended this study to improve understanding of workforce resilience enhancement by e-Training programs, motivation by team leaders and teamwork. The learning intervention (e-Training) to imbibe resiliency in employees was the independent variable and the resilience was the dependent variable.

- To analyze Resilience of workforce through e-Training method during VUCA and in COVID-19 pandemic
- - disruptive situation in NHPC’s Unit located in Chamba region, Himachal Pradesh. To study the e-Training areas during VUCA and COVID-19 pandemic in the NHPC’s Unit located in Chamba region, Himachal Pradesh.
- To analyze the conceptual relationship between e-Training methods and resilience of workforce in NHPC’s unit located in Chamba region, Himachal Pradesh.

5. Results:

Conceptual Framework

When employees enter into organization, they possess low levels of resilience (see Figure 1) when they face any VUCA situation, situation becomes bigger than their capabilities. But, when the employees imbibe with enhanced resilience through various e-Trainings on personality development (HRD) programs; motivated with social security schemes, incentives, rewards etc. by organization and empowered by team leaders for enhancing creativity, sense of humor and emotional intelligence in work and recognition for their efforts and achievement and with team cohesiveness they can easily face and thrive in VUCA.



Figure.1. Employees’ resiliency at the time of joining organization with their pre-traditional beliefs, attitudes, behavior (VUCA situation powerful than Employees’ strength)

The key to survival in the ever changing business world is ‘constant renewal’ by way of updating human resource assets by imparting technical knowhow to enhance their technical skills and modify agility and resiliency through training/e-Training methods to adapt to technological changes & advancements to get compatible in the times of changing organizational environment and demands of the customers. Through e-Training programs, employees’ technical skills and soft skills - positive attitude, enabling social security, emotional intelligence, sense of humour team work and employees’ confidence levels, adaptability to changes and flexibilities, etc. enhances. The same qualities contribute for the success of the organization during disruption situations. Employees are assets of the organization they face challenges and survive organization during crisis situations. Contribute with team work and enhanced resilience levels in bouncing back to the pre/safe position. The various dimensions of resilience on which organization needs to focus and impart e-Training to excel resilience in employees from time to time to thrive in VUCA situations successfully with confidence levels (see Figure2).

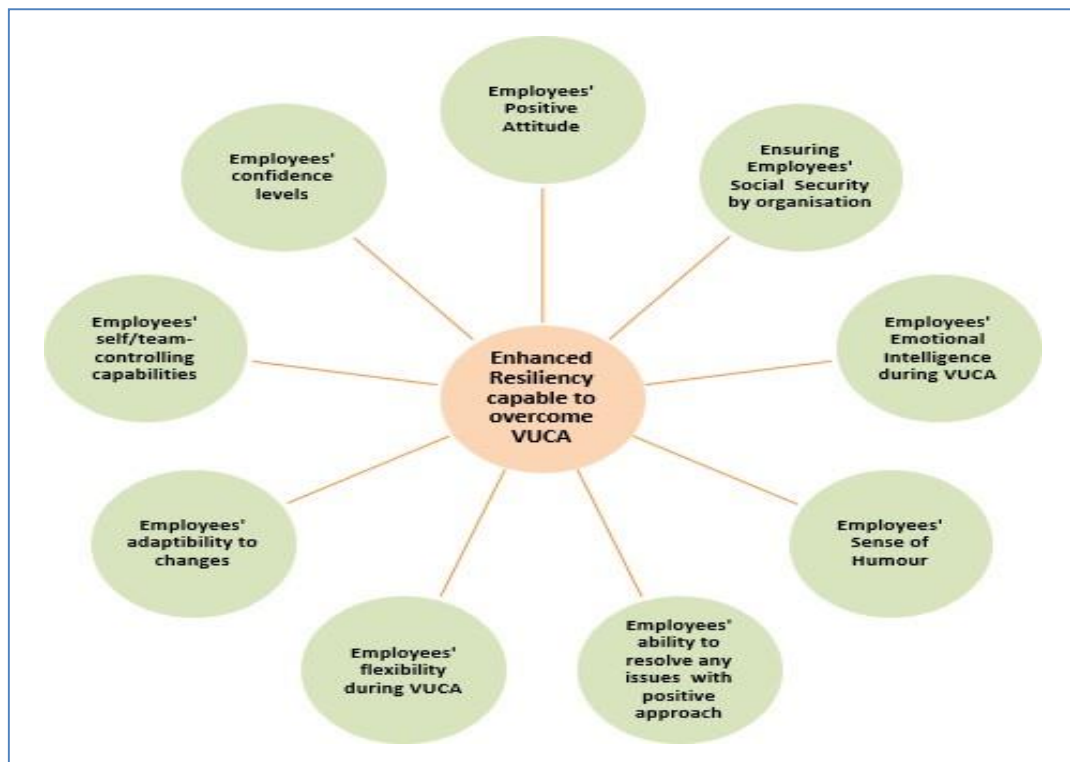


Figure 2. Required qualities to enhance resiliency in employees through e-Training to thrive in VUCA situations

Through e-Training method when employees learn by attending various training programs on technical,

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functional, behavioural & leadership, yoga, health and lifestyle, safety, etc. their resilience levels enhances and they become capable to face and thrive VUCA situations successfully with confidence (see Figure 3)



Figure 3.Personality Development programs (HRD) including Motivation and Teamwork imparted to employees through e-Training to enhance resiliency.

Table 1.e-Training (Webinars/ Workshops/ Conferences) details of NHPC's Unit Chamba Region, Himachal Pradesh(From April, 2020 to March, 2021)

No. of Participants	Executives/ Non-Executives	Area of participation	Theme of e-Training	Duration (Days)	Faculty
8	Executives/ Non-Executives	Health	On COVID-19 pandemic for NHPC Doctors & Paramedical Staff	10-15 April'20 (5 days)	PHFI, Delhi
4	Executive	Hydro Power/ Technical	Concept of Commissioning of Hydropower Projects	16 June-6 Aug'20 (16 days)	Internal faculty from Corporate Office (C.O.)/BHEL
1	Executive	Functional/ Knowledge	The Rising New World Order	21 Aug'20 (1 day)	Bonheur, Delhi
1	Executive	Solar Power/ Technical	Solar Power Emerging Technology and O&M Issues of Solar Power Plants	21-25 Sep'20 (5 days)	IIT, Roorkee
2	Executives	Technical	Distributed Control System, Instrumentation, SCADA Systems and Communications Network	28-30 Sep'20 (3 days)	Internal faculty from C.O, Faridabad
2	Executives	Hydro Power/ Technical	Energy Security Conference 2020	29-30 Sep'20 (2 days)	GCTC, Delhi
4	Executives/ Non-Executives	Health	Fighting COVID-19 (and other viruses)	01-04 & 07-10 Oct'20 (8 Days)	YMVT, HP
1	Executive	Renewable Energy/	Pump Storage-Design, Operation & Integration with	5-9	IIT, Roorkee

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	es	Technical	Renewable Energy	Oct'20 (5 days)	
2	Executives	Health/Safety	Basic Life Support & First Aid Training Under OHSAS & IMS	12-13 Oct'20 (2 days)	OHSAS & IMS, Delhi
7	Executives/ Non-Executives	Functional/HR	Assessment of Competency	Between 13-30 Oct'20 (6 days)	Internal faculty from C.O, Faridabad
3	Executives/ Non-Executives	Hydro Power/ Technical	Small Hydro Power Projects- Cost Effective Implementation	19-21 Oct'20 (3 days)	IIT, Roorkee
7	Executives/ Non-Executives	Technical	Testing Of Generators, Transformers, Reactors, HV Cables, Switchyard Equipment, Transformer	19-23 Oct'20 (5 Days)	CPRI, Bengaluru
1	Executives / Non-Executives	IT/ Technical	Cyber Security –Advance level session	21 Oct'20 (1 Day)	Internal faculty from C.O, Faridabad
3	Executives/ Non-Executives	IT/ Technical	Cyber Security for Hydro Power Plants	27-28 Oct'20 (2 Days)	CPRI, Bengaluru
25	Executives/ Non-Executives	Yoga & Health	Inner Engineering and Mind Balance	09-12 Nov'20 (4 Days)	YMVTHP
2	Executives	Technical	GIS & Outdoor Switchyard Equipment-Layout, Maintenance and troubleshooting	24-26 Nov'20 (3 days)	Internal faculty from C.O, Faridabad
1	Executives	Knowledge	Breaking the Ceiling	24-27 Nov'20 (4 days)	Internal faculty from C.O Faridabad
2	Executives	HR/ Industrial Relations	Labour Laws Executives Should Know	02-04 Dec'20 (3 Days)	All India Management Association, New Delhi
1	Executives	Behavioral/ Functional	Empowerment & Leadership for Women	01-04 Dec'20 (4 Days)	Internal faculty from C.O Faridabad
2	Executives	Solar Power/ Technical	Solar Power-Emerging Technology and O&M Issues of Solar Power Plants	07-11 Dec'20 (5 Days)	IIT, Roorkee
4	Executives	Electrical/	Renovation & Modernization of Power Plants (Technical	14-16 Dec'20	IIT, Roorkee

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		Technical	Challenges, Regulation Of CEA / CERC etc.)	(3 Days)	
7	Non-Executives	Social Security/HR	Changing Face of Retirement	14,21,22 Dec'20 (3 Days)	Internal faculty from C.O Faridabad
1	Executives	Behavioral/Functional	Creativity, Problem Solving & Decision Making	16-18 & 23-24 Dec'20 (5 Days)	Internal faculty from C.O Faridabad
2	Executives	IT/Technical	Windows Server Active Directory	21-23 Dec'20 (3 Days)	Internal faculty from C.O Faridabad
1	Executives	Hydro Power/Technical	Safety and Operational Risk for Hydraulic Structures at Hydro Power Stations	28-30 Dec'20 (3 Days)	IIT, Roorkee
1	Executives	Functional	Preventive Management Vigilance	6-8 Jan'21 (3 days)	Internal faculty from C.O Faridabad
1	Executives	Financial/Functional	Corporate Governance: Corporate Laws, SEBI Guidelines, Listing Obligations and Insider Trading Codes	6-8 Jan'21 (3 Days)	Institute of Chartered Accountants of India
1	Executives	Financial/Managerial	Business Analytics	19-22 Jan'21 (4 Days)	Internal faculty from C.O Faridabad
1	Executives	Functional/Managerial	HRM for Line Managers	25-29 Jan'21 (4 Days)	Internal faculty from C.O Faridabad
2	Executives/ Non-Executives	Hydro Power/Technical	Testing of Generators, Transformers, Reactors, HV Cables, Switchyard Equipment, Transformer Oil and Testing Equipment	1-5 Feb'21 (5 Days)	CPRI, Bengaluru
1	Executives	IT/Technical	Visual Studio 2015- VB.Net & C#	1-6 Feb'21 (6 Days)	Internal faculty from C.O Faridabad
1	Executives	Legal/Functional	Right to Information	2-4 Feb'21 (3 Days)	Internal faculty from C.O Faridabad
1	Executives	Functional	HR Analytics	2-5 Feb'21 (4 Days)	Internal faculty from C.O Faridabad
1	Executives	IT/Technical	Hadoop Big Data	8-13 Feb'21	Internal faculty from C.O

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				(6 days)	
40	Executives/ Non-Executives	Technical/ Functional	General Safety Awareness, Electrical Safety & Basic Fire Safety	10-12 Feb'21 (3 days)	CBIP, New Delhi
3	Executives	IT/ Technical	Cyber Security for Hydro Power Plants	11-12 Feb'21 (2 Days)	CPRI, Bengaluru
15	Executives	Technical/ Functional	IMS Internal Auditor Training	15-16 Feb'21 (2 Days)	IMS Agencies, Various locations of India
40	Executives/ Non-Executives	Health & Lifestyle	Handling Medical Emergency	17-19 Feb'21 (3 days)	Souls Guard, Delhi
65	Executives/ Non-Executives	Health & Lifestyle	1. Happiness through Rajyoga 2. Stress Management	18 Feb'21 (1day)	Rajayoga Education & Research Foundation
1	Executives	Health	Environmental and Occupational Health for Health Professional	22-26 Feb'21 (5 days)	NIHFW, Delhi

1	Executives	Lifestyle	Design Thinking	23-26 Feb'21 (4 Days)	Internal faculty from C.O Faridabad
1	Executives	Functional	Visioning the Future	22-26 Feb'21 (5 days)	ManushoUthan
3	Non-Executives	Health/ Yoga	Inner Engineering & Mind Balance	24-27 Feb'21 (4 days)	YMVTHP
6	Executives	Technical	Sustainable Development of Dams & River Basins & APG Symposium	24-27 Feb'21 (4 days)	ICOLD CBIP 2020, New Delhi
1	Executives/ Non-Executives	Health	Handling Medical Emergency (Batch-I)	25-26 Feb'21 (2 Days)	OHSAS & IMS Delhi
1	Executives	Functional	Domestic & International Finance	2-3 March'21 (2 days)	Internal faculty from C.O

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65	Executives/ Non-Executives	Functional	Enhancing procurement through GeM Portal	3 March'21 (1day)	Internal faculty from C.O
40	Women Employees/ Employee families (women)	Health	Women Health	8 March (1 day)	Internal faculty
1	Executives/ Non-Executives	Health	Handling Medical Emergency(Batch-II)	08-09 March'21 (2 Days)	OHSAS & IMS
25	Executives/ Non-Executives	Behavioral	Enhancing Interpersonal Effectiveness	16-18 March'21 (3 Days)	Refinement Wellness Pvt. Ltd.
25	Executives/ Non-Executives	Behavioral	Managing Work Stress for Superior Performance	22-24 March'21 (3 Days)	Professional Training Academy of India
20	Executives/ Non-Executives	Behavioral	Creativity & Innovation	26-27 March'21 (2 Days)	UDAAN, Ghaziabad
457			191 Training Days/ @ 2 sessions per day =382 sessions		

Source: Compiled by author/s

Table 1 represents various e-Training programs conducted during financial year 2020-21 at one of the selected power plants of NHPC in Chamba Region, which is located very far off place and hilly areas. The employees working for Power Plant both in technical and non-technical trades have attended various e-Training programs, viz., Functional, Technical, Hydro Power/Solar Power/Wind Power/Renewable Energy, HR, HRD, Yoga, Health & Lifestyle, IT, knowledge, etc. The details of programs cited in table. Due to pandemic, traditional training method was not feasible, which is expensive. Power plant adapted e-Training method. The virtual training programs were attended by technical and non-technical employees across Power Plant in different cadres. The programs on Hydro Power, Solar Power, Renewable Energy, Cyber Security, building Leadership, Motivation, Knowledge, Yoga, Health & on COVID-19 pandemic, HRD, communication, performance, Work Life Balance, Happiness through Yoga, Stress Management, etc., have surely enhanced knowledge and resilience levels of all the employees across power plant. Senior Management, Management, Executives/Non-Executives both in technical and non-technical trades and women employees benefited by attending virtual training programs and families of employees attended programs on Women Health, Yoga, Lifestyle Management and got tremendous benefits especially during COVID- 19 pandemic times.

In all it is observed that enhancement of determination, vision, interaction, relationships, organizing, self-confidence, proactiveness, etc. and soft skills like social inter-personal skills, flexibility, empathy, positive attitudes, responsibility, initiative taking, team work have tremendously improved in employees. It is also observed that the resilience levels enhanced are based on employee's educational backgrounds, experience levels, age and gender as well. With enhanced resilience employees are quite ready to face any challenges. They have shown positive approach treating the problem as opportunity instead of threat. With this attitude employees have easily thriving in COVID-19 pandemic and adapting to latest technology/change. By building resilience in employees through virtual trainings, e-workshops, e-conferences, etc. through various modes like Webinars, Google-meet, Zoom, etc., organization has successfully thriving unpredicted VUCA situations and running Power Stations successfully without any hindrance and providing continuous power supply to the nation uninterruptedly.

6. Discussion

In total 457 employees of NHPC's selected power plant in Chamba region Himachal Pradesh were undergone e-Training programs during the Financial Year 2020-21. The e-Training programs were organized for Executives/ Non-executives in technical and non-technical branches. In total 52 e-Training programs were organized in 382 different sessions (Table 1).

Since lockdown period, Training & HRD Divisions of Power Plants located in Chamba region, Himachal Pradesh have conducted various short term e-training programs, webinars, e-workshops/conferences through electronic method. HRD personnel played an important role in nominating, motivating employees for optimum participation, communicated employees to encourage family members to participate in Yoga, Health & Lifestyle programs arranged for them. Employees who were working in offices and working from their homes participated in great number. The participants of e-Training programs on functional/technical, behavioral and leadership development, yoga, health and lifestyle were benefitted a lot and enhanced their present levels of technical/soft skills, knowledge and competency and to keep fit physically and mentally during VUCA and pandemic. The Hydroelectric Power Plants have fully utilized the opportunity of e-Training programs from their Head Quarters and various other locations. The sessions during webinars were successful with the professional calibers and talents of trainers; they have very well trained employees of all the Units during pandemic disruption situations.

HRD with the coordination of Information Technology division has conducted these programs in effective manner. All the senior and middle level executives including technical and non-technical workforce of hydroelectric power unit and their family members expressed gratitude for providing such wonderful opportunity to participate in the e- Training programs. These programs resulted in employees' enhanced resiliency, technical and soft skills and tips to keep fit mentally and physically during pandemic. Certainly one of the important things to learn from pandemic disruptive situations is that grabbing the opportunity to learn knowledge, to keep fit health and gained enhanced resiliency through e-Training method.

e-Training is very much useful when trainees are dispersedly located and far off places from cities. The main advantage of e-Training activities are (i) it can be carried out with minimum costs, (ii) it can save time and (iii) to create Green organization and society (pollution-free environment).

In all after attending e-Training programs employees have shown positive approach to adapt latest technology with their enhanced technical/soft skills, desired behavioral changes and resilience and team work contributed to handle the pandemic disruption situations and VUCA with confidence. When workforce teams reach enhanced levels of resiliency, employees treat the VUCA situation as an opportunity and they smoothly adapt to technological changes and thrive in disruption situations. The e-Training programs are beneficial for all the organizations for cost reduction, to keep update knowledge of employees and enhanced resiliency to thrive in VUCA times.

Overall study reveals that resilience levels built in employees across the Power Plant, who has been provided with e-Trainings on various topics. They have shown enhanced resilience and with updated knowledge they are willing to smoothly adapt to latest technology or changes.

7. Limitation & Implication of Study:

- The research done in Hydroelectric Power Plant located in Chamba region, Himachal Pradesh.
- There is a limited research on enhancing employees' resiliency through e-Training method contributes for organizational excellence.
- The present study also reveals that if workforce motivated by team leaders and team work, workforce exhibit enhanced levels of resiliency and they smoothly adapt to technological changes during VUCA times.

8. Conclusion

This study would contribute to the detailed understanding of employees' resiliency through e-Training method on various programs on functional, technical, developing leadership, including motivation by team leaders and team work to thrive in VUCA situations, where the existing research is limited. Further this study provides interesting insight how developed resiliency in workforce contribute to adapt latest technology and thrive in VUCA situations, when they were empowered with social security, incentives, rewards for creative ideas in work and with strengthened team spirit and positive approach.

The e-Training method is beneficial in imparting technical skills, knowledge, desired organizational behavior in employees, to enhance knowledge & resiliency, which makes employees to adapt to technological changes

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and update of skills to run valuable machinery successfully.

Human Resource Development through organizing e-Training programs on various subjects including technical and soft skills, organizational behavior, etc. thereby organizations smoothly able to thrive VUCA situations. The study contributed to a broader understanding how enhancement of resiliency by imbuing positive attitudes by workforces and their team work achieves success for the organizations, wherein the present research is limited. Further, the study also provided interesting insight how team's performance enhances through enhanced resilience.

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