

Review on Application of Reverse Mentoring during COVID-19 Pandemic

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Abstract: The aim of this review paper is to show the reverse mentoring process used during the COVID -19 pandemic to mitigate the drawbacks of the pandemic situation. The most important fact is that the higher spreading rate of Covid-19 has caused a broader impact on the attitude and behaviour of the global population. In response to this and as a prevention measure, almost all the governments have implemented different measures like social distance and travel restrictions. The changes occurring due to this pandemic situation have created a significant impact on people's behaviour and their work. Therefore, to overcome the situation and for the smooth functioning of day-to-day activities, people and organizations tend to use novel technology. Most sectors use reverse mentoring as a valuable tool to address issues in using technology. Further features and the benefits of reverse mentoring are discussed with the literature evidence. It discusses how reverse mentoring is used to mitigate gaps in education, health, business and others.

Keywords: COVID-19, Reverse mentoring, Technology, Employees, Pandemic.

1. Introduction

The world health organization, on 11th March 2020, declared Covid-19 as a global pandemic. COVID-19 outbreak has case a huge change in human lifestyle. With the implementation of the social distancing policy, people tend to look for alternative ways to carry out day-to-day activities. And many organizations tend to use technology to meet their needs. The use of technology becomes challenging for elderly people. Organizations are improving their modern management tools to adapt to a fast-changing environment. Reverse mentoring is one of the frequently used tools to mitigate the drawbacks of such changes, which is used to link the generational gap between employees in the workplace. This includes striving to close the gaps inside and outside the organization [29].

Unlike traditional mentoring, reverse mentoring is "an inverted type of inter-generational mentoring relationship where the seasoned more experienced executive gets into the shoes of a mentee and the younger, less experienced employee becomes the mentor by providing required skills, knowledge, and support to experienced adults" [6].

In 1999, Jack Welch, the former CEO of General Electric, formally introduced the new reverse mentoring paradigm. Reverse mentoring is defined as an inverted form of the

mentoring relationship in which a junior employee teams up with an experienced manager or employee to help them acquire new knowledge [1]. There are two age groups involved in reverse mentoring those are baby boomers and millennials. One similarity among the age groups is the size of the population is the same. Those who were born between 1980 and 1990 are considered millennials at present; they are young professionals. They are very good at using novel technology.

Reverse mentoring has appeared as a cost-effective tool in teaching and learning. This acts as an innovative method to link the technological gap, realize new trends and diversity, retain employees, maintain social equity and identify and use of talents of employees to get the maximum outcome of it. Reverse mentoring is an effective method to identify differences among generations and minimize the gap between those generations.

Frequently use of reverse mentoring processes has resulted in implementation in various organizations, e.g., Proctor and Gamble; ([11], [6]). Reverse mentoring has core features of intergenerational relationships and is equal to benefits for both parties. Mentors (i.e., less experienced employees) acquire organizational knowledge, leadership skills and social capital, while mentees (i.e., more experienced employees) benefit from intergenerational worldviews, content knowledge and technical skills [28].

2. Reverse Mentoring and COVID-19 Pandemic

Over past years scholarly devotion to reverse mentoring has increased, and this study indicates the use of reverse mentoring during the COVID-19 pandemic situation. The limited scholars address the use of reverse mentoring during this pandemic situation; therefore, it is necessary to discuss the applications of the merits of this theory in managing in crisis which we haven't experienced before.

Unlike traditional mentoring, which traditionally runs from top to bottom of knowledge, reverse counselling ranges from young and junior employees to senior leaders employees. Flipped arrangement in knowledge sharing and learning process is the main difference between reverse mentoring and traditional mentoring. The study by Murphy shows the principal characteristics of reverse mentoring programmes as knowledge sharing and reciprocity.

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It is noted that every time reverse mentoring is not age dependent, and sometimes, it might be cross-generational [19]. It works when junior or new employees joining the organization are recognized as having the knowledge to share and willingness to share with more senior managers. Organizations functioning in highly competitive atmospheres can only get a competitive benefit by making the system available to encourage the different generations to share knowledge. The positive reflection of reverse mentoring is supporting social change and building a link between age groups [6]. There are some conditions to be satisfied for the proper implementation of reverse mentoring. According to Hunt and Michale [20], those conditions are the same as required for available factors in traditional mentoring.

Reverse mentoring consists of four main characteristics as mutual support, the goal of sharing knowledge, the unequal status of partners and promotion of leadership development. According to most scholars in the organization, reverse mentoring is used as a forward-thinking tool which facilitates the environment and growth of both the groups involved in continuous learning [30]. In addition to this, there are positive outcomes from reverse mentoring enjoyed by the mentors in the organization, namely active participation in decision making, problem-solving techniques, developing a good contact network among the employees and leadership development from people with different experiences. Gadomska-Lila also states that reverse mentoring is a new method where younger employees act as a mentor and share their expert knowledge with older employees and with this method offers numerous benefits to both the parties in the relationship as mentor and mentee and also for the whole organization. It acts as an efficient tool for knowledge sharing, creates a platform to develop leadership, and creates international relationships on mutual understanding and creative thinking.

The world health organization, on 11th March 2020, declared Covid-19 as a global pandemic. The most important fact is that the higher spreading rate of Covid-19 has caused a broader impact on the attitude and behaviour of the global population. In response to this and as a prevention measure, almost all the governments have implemented different measures like social distance and travel restrictions. Travel restrictions have made millions of people live through lockdowns. This situation has created uncertainty in the human mind, and still, we can't predict whether this might return to normal or not. How are you doing at present? It's really the easiest of queries; however, it has left many people in the world stammering for an answer in a short period of time. The disorienting impacts of COVID-19 on our daily lives, global wellbeing, and the economy have left people speechless to such a simple question.

The changes occurring due to this pandemic situation have created a significant impact on employees and their workplaces. The most important point is Covid-19 cases have a high risk of health complications and those who have been exposed to this increase the risk of infection within 3-4 days with or without symptoms. This fact has caused a huge changing situation in workplaces and also in the economy.

Most countries are experiencing the peak of the repercussion

of the pandemic. Organizations have to reconsider the way they used to run and adapt to the change. It implies retaining an openness to letting go of tradition and a readiness to consider improvement. Company has to think how they can change to keep people engaged and satisfy the changing demands of the clients." Many of the changes you are making today will have a lasting effect on the company and society in the long run, in how you plan, raise staff productivity and reinvent how you used to do stuff.

As a result of the COVID pandemic situation, the concept of new ways of working has been spotlighted. Novel technology has facilitated the working environment with various types of alternative work arrangements, namely teleworking, remote working and flexible working [14]. Prior to the Covid-19 pandemic situation, these trends also existed, and the global travel restrictions have automatically created an immense force for organizations to implement new ways of working. While creating a promising trend, this concept feature is currently playing a prominent role in the organization due to the high acceptance rate among the multi-generational workforce.

There is a growing trend around the globe to have more people working from home, particularly in the current COVID-19 pandemic. This is the best solution to choose from by any organization, either public or private, as the workplace is one of the most at-risk places that can get infected by the virus. Work from home is an arrangement in which an employee accomplishes his/her responsibility using ICT technology while staying at home. This is an alternative / temporary arrangement with commitment and responsibility by both employee and employer to for the purpose of this guide and in the context of the COVID-19 pandemic, the term "working from home" is used to refer uniquely to home-based teleworking as a temporary, alternative working arrangement. It requires shared responsibility and commitment by both employers and workers to ensure business continuity and employment.

Physical distance and quarantine measures are implemented to combat the pandemic of COVID-19. In order to fulfil this mission while maintaining the status quo, several kinds of human actions, such as meeting, working, learning, shopping, and entertainment, are switching from offline to online, and the diffusion of new digital technologies among ordinary people is accelerating. While people are digitizing, the gap between citizens with and without access to technology continues to be wide.

Organizations are enhancing their modern management tools to adjust to fast-changing situations. One of the currently used tools in this field is reverse mentoring, primarily on generational gaps among employees in the workplace. This includes efforts to bridge the gaps within and outside the organization to understand the next generation of customers [29].

Adaption of reverse mentoring theory reveals that it involves a reciprocal exchange link (Lejonberg et al., 2015), and as a reward of this bond, both mentees and mentors try to get optimum benefit at a minimum cost. According to Pijpers (2006), to be a part of the reverse mentoring process, both parties must trust each other and be a volunteer. Young

employees are embracing networking, very technologically, collaborative, entrepreneurial, savvy and able to multitask.

For every institution, reverse mentoring programs play a crucial role. This is a programme which gives huge benefits to the three parties who are involved in this bond; explicitly, the mentor will develop confidence, and on the other hand, the mentee will acquire inspiration. The created bridge between the two parties provides a mentor to disseminate his latest knowledge to experienced employees through a systematic way to exchange innovative ideas for wisdom. Adopting a fruitful development program like reverse mentoring the organization as the third party will benefit employees in different age categories who have sound knowledge of their working environment.

The main advantages of reverse mentoring can be categorized into three: First, for mentors, reverse mentoring enhance confidence by negotiating with senior employees. Simultaneously, the process enhances the youth's awareness of 'tacit knowledge about social media and technology. Reverse mentoring also provides career opportunities for mentors to meet and negotiate directly with senior management. It enables to the improvement of executive-level contact networks in addition to peer networks. Reverse mentoring provides mentors with the opportunity to acquire experience and develop leadership skills. And also enhance the decision-making ability of the mentor. Reverse mentoring provides a meeting place for senior executives to provide optimum training stress. Therefore, this position can contribute to the development of the innovative and creative abilities of the mentor. Second, the practice of reverse mentoring, coordinated by the human resources department, enhances managers' ability to adapt to change, forcing them to break out of their daily schedules to meet and receive information from young people. Therefore, this is an opportunity for mentors where they can enhance their innovative and creative skills. Second, HR backup policies increase the likelihood that managers will make changes to change their routines and meet young people. Arranging meet-ups with senior personnel and the junior human resources department can allocate time slots of senior managers' routine schedules for this specific purpose to receive information from young employees. It is a great tool for understanding what is really going on in the organization for both senior and junior employees. Younger members will understand what is happening at the highest level and why and how decisions are made, and management will have the opportunity to evaluate how this process actually affects people in the organization. Practising reverse mentoring programmes creates a platform for mentees to meet people from different hierarchical levels and generations. And also, they will gain information on both customer and employee relations. Finally, it is realized that organizations benefit from reverse mentoring to create a learning environment within the organization. The practice of reverse mentoring allows knowledge to be transferred in two ways: top-down and bottom-up. Therefore, these efforts have entered an open communication system forming a productive organization. Providing more space for the senior employee may create a positive image of the organization's goodwill and

will benefit not only the employees but also other parties such as interns, students, and employees outside the organization.

In enmity to conventional mentoring, which traditionally involves a top-down flow of knowledge, reverse mentoring is known as mentoring a young, inexperienced employee (junior) to an experienced leader [30]. In other words, reverse mentoring starts with flipping the traditional mentor-mentee relationship [10]. The contribution of reverse mentoring practices, guided by continuous skill improvement, is particularly evident today. Therefore, this is of great concern (Chen, 2013). Instead of taking advantage of traditional mentoring, a reverse mentoring program can be introduced so that young 'digital tech savvy' employees can provide valuable technical knowledge to older generations in the workplace and provide insight into employee needs and clients within Millennials and Generations. Z is also known as generation or post-millennial generation [2]. This approach enables lower-level employees in the organization to share their knowledge with senior employees on social media (DeAngelis, 2013; Meister & Williard, 2010; Gibson & Sodman, 2014), new electronics (Keener et al., 2012; Dixit & Palke, 2015) and topics.

Many institutions are still discovering how reverse mentoring can be applied innovatively institution-wide and the advantages that can gain other than the technology. A careful review of professional and academic literature divulges that reverse mentoring has been used in fruitfully in the areas like leadership (Gabriel et al., 2020; Kulseza and Smith, 2013), engagement (Biss & DuFrene, 2006; Boysen et al., 2016; Chaudhuri & Ghosh, 2012) communication (Breck et al., 2018; Gabriel et al., 2020) inclusion and diversity (Raza and Onyesoh, 2020; Süss-Stepancik & Permoser, 2017; Madison, 2019), course technology (Alvarez et al., 2005; Augustinien and Ciu ciulkien, 2013) and subject matter advances and social media (Breck et al., 2018; Gabriel et al., 2020; Leedahl et al., 2019).

According to Vargo (2021), during the pandemic situation, work professionals are considered a unique group of people who use technology [34]. Researchers, scientists, and employees from all walks of life continue working remotely by using digital technologies during COVID-19. Different from the healthcare and education domain, it is not obvious to identify the providers and receivers of technology used in telework. From the work perspective, most of the time, no matter what kind of technology is being used, the work professionals are acting as both providers and receivers. For example, an employee could get direction from their supervisor while also needing to report their work by using Zoom.

Few studies are conducted on some sectors; for example, Hernandez et al. (2018) conducted a study on "reverse mentoring's effectiveness in the healthcare industry". Bmj (2020) illustrates that most countries are experiencing the peak of the repercussion of the pandemic. There is a growing trend around the globe for having more unbearable amounts of COVID-19-infected patients in hospitals and care centres. Therefore, across the world, all the doctors, allied health professionals, nurses and other health sector-related employees call for full duties to control the pandemic situation. In this

situation, even specialists and more experienced senior doctors face challenges in working in an environment that some of them haven't engaged in for years. As an example, a well-experienced anaesthetic may be allocated to the ICU (intensive care unit), where he hasn't worked for many years. This redeployment is more challenging for a certain doctor or medical professional to handle as they haven't handled equipment in ICU for ages, and they lack novel technology for operating the machinery. Where they find junior colleges will supervise or guide them to carry out daily practices. As an emergency response to the COVID-19 pandemic situation, reverse mentoring can be applied in the medical field to overcome the gaps in novel knowledge and latest practices and to build up interpersonal relationships within the team.

Consequently, there is a need for reverse mentoring to bridge the skills gap between people facing a global crisis due to technology transfer and unusual changes in human behaviour. Organizations now have a simple question to answer. How many employees and people in society are known to use digital technology during the pandemic?

Organizations apply modern and creative management tools to overcome the challenges occurred in a rapidly changing environment and to facilitate the smooth functioning of the organization during the current pandemic situations. Therefore, they promote the reverse mentoring concept as one approach to sharing knowledge among the employees. Whereby a junior employee is allocated as a mentor to the senior employee in order to minimize the technical gap between the two generations and to mould the future leaders [30]. This is not only a management tool to eliminate the gap inside the organization but is also utilized to understand the new generation of customers [29].

Employers should provide information to their workers because workers are likely to be anxious about the COVID-19 pandemic, and they may have questions about the health risks and changes to their working arrangements or employment status. It could be said that as the circumstances of COVID-19 are continually changing, giving regular updates to workers about the situation with COVID-19 will assist them with feeling supported and motivated and, consequently, staying spurred to help and adjust through the difficult time. Regular communication of important information regarding the COVID-19 outbreak and changes in organizational practices to employees will prevent confusion, misinformation, and rumours will, ensuring the productivity and wellbeing of the employees. During the pandemic, specifically, when employees work from home, it is necessary for employers to keep in touch with their employees in order to make sure the smooth functioning of the workplace as well as to ensure that rumours or misinformation are not spread among the employees regarding work-related matters. It is better to maintain direct communication with employees because if employers make use of indirect modes of communication such as passing on important messages and information, it would sometimes lead to misunderstandings, confusions and conflicts too. Organization can use reverse mentoring process as a solution and a tool for miscommunication during the pandemic situation

as it has more effective results in transferring information.

Many researchers have proven that putting together young employees with senior employees can pass the information efficiently and quickly between people in bilateral relationships (Greengard, 2002; Harvey & Buckley, 2002; Murphy, 2012; Chaudhuri 2015; Wingard 2018). "The results at General Electric were overwhelmingly positive and quickly spread to other prominent organizations like Time Warner, Dell, Thomson Reuters, Microsoft, Hewlett-Packard, CISCO Systems, Target, United Healthcare, Fidelity Investments, Unilever USA, and International Business Machines (IBM) (Ehrgott, 2009; Greengard, 2002; Harvey & Buckley, 2002; Hays & Swanson, 2011; Kwoh, 2011; Microsoft News Centre Europe, n. d.; Wingard, 2018)".

In response to COVID-19 and as a prevention measure, almost all the countries around the globe have implemented different measures like social distance and travel restrictions. The changes occurring due to this pandemic situation have created a significant impact on the population. One of the impacts is social Isolation among adults is high, and this has created additional pressure on their mental health. The social welfare sector has recently recognized social Isolation as a major challenge to be addressed [27]. To identify many aspects of prevention, the AARP Foundation (2012, pages 11-12) has defined social Isolation as "Isolation is the experience of diminished social connectedness stemming from a process whereby the impact of risk factors outweighs the impact of any existing protective factors. A person's lack of social connectedness is measured by the quality, type, frequency, and emotional satisfaction of social ties. Social Isolation can impact health and quality of life, measured by an individual's physical, social, and psychological health; ability and motivation to access adequate support for themselves; and the quality of the environment and community in which they live."

To mitigate this, young people can train elderly persons to use social media so they can spend their time in a meaningful way. Growing up in a world where technology has become a part of daily life, young people with unique skills can often guide older people well in using social media and the Internet [3]. One of the major challenges for social workers is to identify innovative concepts to encourage adults to use technology through training them on it ([25], [29]). Literature suggests that elderly people are eager to use new technologies if they get formal training on them. [29].

According to many studies reverse mentoring is applied to address social Isolation in elderly people by getting the ideas and talents of young people, linking generational leadership variations (Meister & Willyerd, 2010; Sessa, Kabacoff, Deal, & Brown, 2007), and knowledge exchange (Murphy, 2012). The findings of Bethany *et al.* (2017) illustrate that reverse mentoring can be used in several situations to reduce the social Isolation of elderly people by increasing intergenerational connections and enhancing the competency of digital technology.

Education and business are the two main groups of digital technology users, other than health authorities and government employees, and to combat this global epidemic, people around

the world are getting used to the technologies used in their daily life. Public health and government officials are using mobile tracking technology to track the spread of an epidemic or big data technology to analyze outbreaks and implement strategies. At the same time, the general public around the world receives information through digital tools. Vargo *et al.* (2021), in the review article, have stated that quite a large number of literature has documented various users of these techniques during the COVID-19 pandemic [34]. The main four domains of technology handlers are coming under work, education, health care and other sectors.

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According to Vargo *et al.* (2021), the Covid-19 outbreak and its prevention methods have forced a large population to stay at home and study remotely [34]. Therefore, to continue distance learning education, students and educators are using online teaching methods. During this situation, among the digital technology users education sector is becoming the second large group who use the technology. Subedi *et al.* (2020) also emphasize that electronic learning tools played an important role in this pandemic and helped schools and universities to make learning easier for students during college and completion [32]. When adapting to new changes, the preparedness of staff and students should be properly assessed and maintained. A mixed method was used in another new study to discover the outcomes of reverse mentoring in the education sector and find out the benefits due to mentoring interventions [25]. Accordingly, there are many countries around the globe where older academics are not much familiar with digital technology, and this unexpected pandemic situation has made them use it to teach students. Most of their students are milliners, and they have good competency in using technology. Elderly teachers seek help from the younger teachers in gaining knowledge to use new technology in teaching and preparation of teaching material (Ex: video, using zoom app). On some occasions, they ask for help from the students when they feel difficult to fix the error that occurs while carrying out the lessons. Sun *et al.* (2020), in their study, mentioned that teachers put great effort into adapting online teaching and preparing online teaching materials [33]. The best example given by Gewin (2020) is Mathematician Leonardo Rolla, who teaches mathematics for two semesters each year at New York University (NYU) in Shanghai, China [15]. With the help of his colleagues in technology, during COVID-19, he created a remote learning system for linear algebra for 33 students from advanced classes around the world.

COVID-19 outbreak and economic crisis accompanying are creating unprecedented pressure on both the employees and employers; their live hoods depend on the organizations. Both the organizations and employees are eking due to unexpected economic crisis. Therefore, due to the pressure and stress, a large number of employees are trying on job switching. The findings of Grag *et al.* (2021) say that reverse mentoring and

job skills are positively associated with work conduct, which will enhance job performance and reduce work withdrawal [13]. Work conduct totally facilitates the relationship between reverse mentoring and withdrawal actions and moderately facilitates the relationship between reverse mentoring and work conduct.

Many researchers have shown in their studies that reverse mentoring is a good process for employee retention. And they have identified employee retention and recruitment as one of the benefits of practicing reverse mentoring ([30], [8]; Gugercin, 2017; [21]; Kato, 2019).

3. Conclusion

During the last two years, the COVID-19 pandemic has caused remarkable changes in social life and human behaviour. In response to the fast-spreading disease, all the countries around the globe have taken preventive measures like social distance and travel restrictions. Travel restrictions and quarantine measures have made millions of people living through lockdowns and changes in their livelihood. Due to these rapid changes, organizations are looking for innovative management tools to reduce the impact on their organization. Unexpected travel restrictions have increased the use of technology by the people, and the older generation faces difficulty in handling new technology; therefore, reverse mentoring is used to overcome the gaps. Reverse mentoring is used effectively in many sectors like business, education, health, and the public are some of them.

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