

# EFFECTS OF OFFLINE VS ONLINE EDUCATION MODE ON SOCIAL RELATIONS: A QUALITATIVE SURVEY

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**Abstract:** This study aims to investigate the importance of social interaction on the effectiveness of online learning during the pandemic when social distancing norms are in place. The pandemic of COVID-19 has pushed most of the classroom learning to an online environment with which most people were not familiar. The study will be helpful for instructors and educational institutes to formalize the strategies to enhance social interaction in online learning and analyse their pedagogy to improve effectiveness. This study data was collected between January and March 2022. The sampling procedure begins with a random sample of age groups 18-20 followed by those aged groups. The target groups were students who took online and offline classes before and after the pandemic, college students, recent graduates, and School students. As shown, the interview was conducted directly through Google Forms and lasted an average of 45 minutes. The results suggested that social interaction has a positive significant impact on the effectiveness of online learning. However, this effect is reduced in the presence of social distance norms as people give more importance to continuous learning and to saving lives rather than socializing in the online environment.

**Keywords:** Educational institution, online learning, offline learning, and social interaction.

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## Chapter 1 Introduction

In general, social relationships refer to interactions between entities that have recurring interactions and who are perceived by participants as having a personal meaning. This definition includes relationships between family members, friends, neighbours, co-workers, and other associates, but excludes social contacts and interactions that are fleeting, incidental, or perceived to have limited significance (e.g., time-constrained interactions with service providers or retail employees). Scientists interested in behavioural medicine often emphasize the informal social contacts that are important in a person's life, or the person's social network, rather than formal relationships, such as those with physicians, lawyers, or clergy. The relational phenomena that scientists are interested in include, at the same time the interactions between individuals. Social group and social structure can only be inferred by carefully seeing social interactions. This can range from the first meeting of parents and children to complex interactions with multiple people after they become adults. Social interactions include the development of cooperation and competition, impact on the status and social roles, dynamics of group behaviour, leadership, and commitment. Constant social interaction between certain people leads to the formation of social relationships. Only by carefully seeing social interactions can we infer social organization and structure. Social interaction is the basis of all social order. Social groups are products of social interaction. Interactions are the true foundation of all processes, structures, social groups, and social functioning. In sociology, interaction is the gateway to learning. A key element of social life expectancy is social interaction, i.e., how humans behave and react to the behaviours of others. To remind you of the old John Donne paraphrase, no one is an island. This means that everyone, except those who prefer to live alone, interacts with others almost every day, and often several times a day. Effective social interaction must also be possible for social order, which is not a requirement of any society. Partly because of this, sociologists concerned with microsociology have long been attempting to recognize social life by evaluating how and why individuals interact and why they work together in ways and not in other ways.

### 1.1 Social Exchange Theory

The theory of social exchange is a sociological point of view that justifies social change and stability as a process of discussed relations among the parties. The theory is oriented around the rational choice theory or the idea that every human behaviour is guided by an individual's interpretation of what is in his best interests. Social exchange theory claims that relationships are essential to living in a society and that it is in society's best interest to form relationships with others. Of course, the problem of whether having a relationship with a specific person is in the personal interest is a calculation that both parties have to make. Nevertheless, social exchange theory asserts that relationship building is beneficial through the exchange. Each part of the relationship exchanges specific goods and perspectives, creating a richer life for both. If social exchange theory can mean the exchange of property, it can also mean the exchange of more intangible elements. For instance, it is in the interest of a dairy farmer and a vegetable producer to form a relationship for the reason that they can exchange their physical assets. The theory also applies to Jack and Jill who decide to marry because of the emotional support they exchange between themselves.

The theory of social exchange is only understandable from the perspective of the theory of rational choice. The rational choice theory supposes that each individual evaluates his/her behavior by the value of this behaviour, which is a function of rewards with fewer costs. Rewards are the elements of relationship life that have a positive value to an individual, while costs are the elements of relationship life that have a negative value to an individual. Social exchange theory assumes that individuals perform cost calculations when they decide to form or keep relationships with others. A good example of this is the proverbial pros/cons list that someone can use when deciding to stay or break up with someone important to them. Social exchange theory is based on several hypotheses. First, people seek rewards and avoid punishment. Second, people engage rationally. Finally, social exchange theory recognizes that the norms by which people evaluate costs and rewards change over time and among people. This means that what may seem reasonable to one person may seem completely irrational to another. But if an individual's decision to form a social relationship involves a valuation, whatever that means for the individual, behaviour is within the framework set up by social exchange theory. A relationship is any relationship between two people that can be positive or negative. You can build relationships with a variety of people, including family and friends. The expression "being in a relationship", although often related to love relationships, may refer to a variety of associations one person has with another. Being in a relationship does not always mean having physical intimacy, emotional attachment, and/or commitment. Relationships tend to fall into one of the following categories (although they can sometimes overlap):

Family relationships

Friendships

Acquaintances

Romantic

Sexual

Work

Situational relations (sometimes known as "situation ships")

These different forms of relationships may differ greatly in terms of proximity, and there are also different subtypes of relationships within each of these basic types. Here are some of the diverse types of relationships you could experience at any given time in your

life.

In all aspects of industrial relations at school, cooperation takes precedence over competition. Through small group activities, children learn to collaborate, make friends, and respect others. Collaborative learning is encouraged and encouraged, and teams of children and adults often work together to solve problems. Children develop an understanding of the social world as they see themselves in the home, family, culture, school, and society. They also learn social adaptation by mimicking adult roles and fantasy games. A problem-solving approach is used to help children learn how to resolve conflict. Through discussions of adult events, literature, puppetry, and role-playing, children are encouraged to find problems, express their feelings, and find solutions. Children also learn about the importance of self-regulation and rules of conduct in all social relationships. Friendships are seen as important values and help children build relationships with their peers. The importance of social relationships for physical and mental health. Many of us have filled our holidays with family and friends, blowing the other sex off and enjoying good conversations, hugs, ideas, and kind words of love and support. An invigorating and much-needed dose of human interaction after nearly a year of oppressive social restrictions caused by COVID19. But, sadly, the COVID virus did not vanish with the dawning of a new year, and we are advised to settle back into our “new normal” routine of mask-wearing, social distancing, quarantining, etc. It seems like an enjoyable time to talk about the importance of staying connected and nurturing our social relationships, even during the COVID pandemic.

### 1.1.1 Why do social relations matter?

People are by nature sociable, like most animals. It is a path of nature. Even ants carry social behaviors! Although, as humans, our social relations are far more complex and enriching. They give us a sense of connection, purpose, support, and overall improvement in health and longevity at the end of the day. Dozens of studies have shown that individuals with meaningful relationships with family, friends, and community members are happier, have fewer health issues, and live longer. Scientists have discovered that connecting with others helps relieve unhealthy stress levels. As most of us are aware, chronic stress can be detrimental to your mental and physical health and contribute to many serious health problems. Some research even suggests that the act of caring for another person can release stress-reducing hormones for both the giver and receiver. Reducing stress is not the only health benefit provided by strong social relationships. We also learn healthy habits that help us take better care of ourselves and other people. Then, of course, there is the obvious... when you are in a nurturing relationship, both parties tend to vest in each other's health and wellbeing, as well as their own, because they want to stick around for each other. “Lacking social connection carries a risk that is comparable, and in many cases, exceeds that of other well-accepted risk factors, including smoking up to 15 cigarettes per day, obesity, physical inactivity, and air pollution.” Julianne HoltLunstad, Ph.D., professor of psychology at Brigham Young University's What are the health risks of people with no strong social connections? It is well set up that prolonged social isolation, even in healthy and functional persons, will eventually lead to psychological and physical disintegration, and even death. People without strong quality social relationships are at a much higher risk for:

- Depression/anxiety
- Elevated levels of stress and inflammation, which can adversely affect coronary arteries, gut function, insulin regulation, and the immune system
- A wide range of illnesses, including cardiovascular disease and cancer.
- Cognitively and functionally impaired, including dementia
- Declining resistance to infection.
- Delayed recovery from injury, surgery, medical condition, etc.
- Premature death (50% heightened risk)

Having social ties with others is commonly regarded as a basic individual need, essential for well-being and endurance. Excessive examples show infants in supervisory care who lack human contact do not thrive and often die, and indeed, social isolation or isolated limit has been used as a form of punishment, said Julianne HoltLunstad, Ph.D., professor of psychology at Brigham Young University. "Yet a growing proportion of the American population is routinely isolated." According to a Loneliness Study by AARP, approximately 42.6 million adults over age 45 in the United States were estimated to be suffering from chronic loneliness. Even more worrisome is that the statistics for loneliness among teens and young adults between the ages of 18 and 22 are oddly similar. Rethinking Social Relations in Old Age: Digitization and Social Life of Older People (2020). Interactions with technology have shaped human society from the very beginning. Recently, digitalization has pervaded all aspects of our lives and provided us with new ways to communicate with our social contacts and develop new social ties. We are looking at how these changes shape the social life of older people today. Several factors may give rise to concerns that older adults today are at risk for social isolation, including demographic trends toward smaller families, or reduction of earlier activities due to health limitations. Meanwhile, older adults now have access to modern technologies that can help them overcome barriers to geographic distance and mobility. First, using technology adoption models, we are looking at research on seniors' use of digital technology although older people use less technology than other age groups, their use of the Internet (social networks) is increasing. However, there are socio-demographic differences in access to technology. Second, we will focus on three key questions and methodological directions for future research. (a) Does (social) Internet use contribute to more positive social experiences and the well-being of older people? b) What are future methodological guidelines for studying the use of social skills in older people? c) Do digital technologies change the social experience of old age, or do they reinforce existing preferences and behaviors? Answering these questions can help us understand the impact of technology on the daily lives of older people and how it will affect multiple functional areas of future generations (e.g., well-being, cognition, and physical health).

## Chapter 2. Review of literature

Dehghani, et.al. (2022) Experiences of students and faculty members about using virtual social networks in education: A qualitative content analysis. Introduction: Virtual social networks have become increasingly popular with academics and health science students. It is necessary to examine the opportunities and challenges of these networks based on the views of faculty and students to describe the existing situation and plan for proper use. The purpose of this study was to explore the experiences of students and faculty members about the opportunities and challenges of using virtual social networks in education. Methods: In this qualitative content analysis study, twenty-two semi-structured interviews were conducted with eight faculty members and fourteen students at Jahrom Universities of Medical Sciences. Participants were chosen through selective sampling. To analyze the data, an inductive content analysis methodology was used. The rigor of the qualitative information was verified using the Guba and Lincoln criteria. Results: Five main categories were extracted from the data as opportunities for using virtual networks in education including improving communication skills; promoting learning; strengthening and facilitating learning of clinical procedures; creating research questions; and educating patients. Four main categories were also derived as challenges of using virtual networks in education including accuracy and validity of information; security and privacy; proper contextualization and culture-building; and control and monitoring of virtual networks. Conclusion: Based on the findings, unique opportunities and challenges have been explored concerning the use of virtual networks in education. These opportunities and challenges and finding ways to obviate challenges and convert them to opportunities can lead to effective virtual learning, particularly in students who mainly use this method of education, and consequently increase the quality of learning.

Najib et al. (2022) Effects of offline and online learning during the COVID-19 pandemic. The purpose of this study is to determine the effectiveness of offline learning and e-learning using a two-way analysis of variance. The subjects in this study were undergraduate students of FKIP PGRI Banyu Wangi University from the history education study program. The quasi-Experimental Design method consists of two groups, either online or offline, that cannot fully operate to control external variables that may affect the experience. Students in the Faculty of Teacher Education and Training account for up to 132 students. Based on the results of the two-way ANOVA test, a significant result of  $0.056 > 0.05$  was obtained, it can be concluded that there is no difference between Learning Effectiveness based on study programs at the teaching and education faculty at PGRI Banyuwangi University. but if seen from the results of the significance of  $0.00 < 0.05$ , it can be concluded that there is a difference between the effectiveness of learning based on teaching methods in the faculty of teacher training and education science at the PGRI Banyuwangi university Method: In this qualitative content analysis, 22 semi-structured interviews were conducted with 8 professors and 14 students from the medical school. Jerome. Participants were selected through selective sampling. For data analysis, an inductive content analysis methodology was used. The accuracy of qualitative information was tested using Guba and Lincoln criteria. result. Five main categories were extracted from the data. Opportunities to use virtual networks in education, include improving communication skills; promoting learning; Strengthening and facilitating clinical procedural research. create research questions and patient education. Four main categories of issues were also identified in the use of virtual networks in education, including the accuracy and reliability of the information. security and privacy; appropriate contextualization and culture-building; Control and monitoring of virtual networks. conclusion. Based on the data obtained, the unique opportunities and challenges associated with the use of virtual networks in education were studied. Finding ways to solve these opportunities and challenges, and problems and turn them into opportunities can lead to effective virtual learning, especially for learners who primarily use this learning method, thus improving the quality of learning.

Sanz et.al. (2021) Relationships among relational coordination dimensions: Impact on the quality of education online with a structural equations model. E-Learning is common in university systems. This type of education does not have restrictions on students and supplies greater flexibility to the learning process. This together with the improvements provided by the application of information and communications technology (ICT) in higher education online systems allows them to reach higher degrees of the coordination and integration of processes by improving the competitiveness and research ability of these organizations. Relational coordination is a validated tool for measuring and analyzing the quality of communication and relationships amongst participants of any process by considering functional organizational boundaries The purpose of this study is to analyse the relationship between the quality of the university's online education system and the relational adjustment. Questions were developed and distributed to 243 students. Data were processed using structural equation modelling (SEM) techniques. The results show that an elevated level of university accommodation leads to an elevated level of educational quality.

Ulfa et al. (2021) Comparison of the effectiveness of using online and offline communication methods to build relationships with students in schools. The COVID-19 pandemic has changed the way life interacts in all areas, including education and training. The majority of the process of communicating with students takes place online. But the effectiveness of online communication is unknown. Consequently, this study aims to describe the communication techniques applied by the teacher and to compare the effectiveness of online and offline techniques in interactions with students. This research was carried out in Batu City, with samples from 57 primary school teachers collected using the cluster random sampling technique. The data collection technique used a questionnaire and was analysed using descriptive statistics, t-test, and ANOVA. As a result, the offline communication method was found to be more effective than the online communication method. There is no difference in the effectiveness of the communication method according to the gender, educational background, rank, and career of teachers. The frequency of use differs according to the teacher's educational level and working hours.

Dwivedi et al. (2021) online versus offline cultural adaptation on purchase intention: a multi-group analysis of the role of education. The purpose of this study is to understand the degree to which ethnic minorities' preference for online and offline culture adaptation affects their purchasing intentions. This study explores the role of social media as agents in cultural adaptation and its impact on consumption. The role of coordinators at the level of education is also taken into account. Research findings highlight the importance of learning about language and friend orientation and subsequent cultural adaptation preferences. Empirical results support the influence of language and friend orientation on inculturation/culturalization, which in turn influences purchase intention. The findings point to differences in education levels between the three groups. This study not only reviews contributions to theory and guides future research, but also provides useful practical insights for marketers.

Jain (2021) understanding of the impact of virtual education on preschool children and the relationship between teachers, parents, and children during the global pandemic. The global COVID19 pandemic has significantly changed the learning experiences of children, parents, and educators around the world. For incredibly young children, the scrambled introduction of complex virtual tools as a proxy for the classroom experience has been particularly challenging. I have been interviewing kindergarten teachers and parents of young children to better understand their virtual learning experiences during stressful times. Observations from these discussions informed the iterative design process that I used to generate alternative interactive interfaces for online kindergarten education. In this thesis, I present the results of the interviews, the process of designing the interface in several stages, the participant's responses to the design of the interface, and promising directions for future work.

Radhamani et.al. (2021) What virtual laboratory usage tells us about laboratory skill education pre and postCOVID19: Focus on usage, behavior, intention, and adoption. The COVID19 pandemic has created uncertainty in the education response, training methods, and training practices of educators and institutions. Even before the pandemic stopped, the integration of virtual labs into classroom teaching had led to transformations in the teaching of lab courses. Virtual laboratories were incorporated as training platforms to complement learning objectives in laboratory education, particularly during this pandemic-imposed closure. In the context of suspended face to face teaching, this study explores the role of virtual laboratories as Massive Open Online Courses (MOOCs) in ensuring the continuity of teaching-learning, providing alternative ways for skill training from home as an innovative approach, the study presents the theory of push-pull mooring to analyze the intention of users to transition from offline conventional education to online education. The study explores the complementary physical experiences introduced through animations, simulations, and remote laboratory facilities to provide elements of training to learners. To test whether virtualization techniques have a global impact on the education sector, the study included a comparative analysis of student users during the academic year 2019 (before COVID) who had a blended approach to learning and those of the year 2020 (post-COVID), with remote learning. Pre COVID-Baseline Behavioural Analysis for University Students (n.= 1059) mentioned the considerable popularity of virtual laboratories in education for vocational training and instructor dependence. The use of virtual laboratories increased during pandemic lockdowns and learners were less reliant on instructors. Twenty-four percent of students consulted more than ten times a week without the instructor being present and, overall, 90% contributed to a minimum of 5 uses a week. About Kolb's learning styles, most learners in the virtual lab were assimilators. The results suggest virtual laboratories may have a prominent role in inquiry-based and self-guided education with the smallest instructor dependency, which may be crucial for complementing practice skills and planning online tools to add to this postCOVID19 teaching and learning scenarios

Hülür1 et.al. (2020) Rethinking social relationships in old age: Digitalization and the social lives of older adults. The interplay with technology has shaped human society since its start. Recently, digitalization has pervaded all aspects of our lives and provided us with new ways to communicate with our social contacts and develop new social ties. We are looking at how these changes shape the social life of older people today. Several factors may give rise to concerns that older adults today are at risk for social isolation, including demographic trends toward smaller families, or reduction of earlier activities due to health limitations. Meanwhile, older adults now have access to modern technologies that can help them overcome barriers to geographic distance and mobility. First, using technology adoption models, we are looking at research on seniors' use of digital technology. Although older adults make less use of technology than other age groups, Internet (social) rates increase. But there are sociodemographic disparities in access to technology. Secondly, we focus on three key issues and methodological orientations for future research: (a) Does the use of the (social) Internet contribute to more positive social experiences and the well-being of older people? b) What are the future methodological guidelines for the study of the use of social technologies among the elderly? (c) Do digital technologies reshape the social experience in old age or do they reinforce existing preferences and behaviors? Addressing these questions will allow us to understand the effects of technology on older adults' daily lives and how this, in turn, affects multiple domains of functioning (e.g., well-being, cognitive function, physical health) in future generations.

Kent et al. (2019) The link between offline social capital and online learning. This article examines the interaction between offline social capital and online interaction in the discussion of e-learning in higher education. The field study examines interaction networks extracted from four classes of online discussions and offline verification questionnaires. Two classes belong to a traditional offline university where offline knowledge is a shared resource, and two classes belong to a distance learning university with heterogeneous offline knowledge. We analyzed offline and online networks of interactions at the individual, quantum, and social levels. We found a positive relationship between offline social capital and e-learning in all classrooms at the individual and pair levels. Using network analysis, we found evidence for a relationship between offline and online networks at the community level, suggesting that online interactions can be encouraged as an added dimension of offline social capital.

McIsaac et al. (2019) social presence and interactive connections in online classrooms. The purpose of this study is to study social existence in an e-learning environment. The dimensions of social reality have been explored both quantitatively and qualitatively. Three dimensions of social presence social context, online communication, and interactivity appeared as essential elements in establishing a sense of community among online learners. The confidentiality factor also played an important part in the level of comfort of online students. The level of online interaction increases at the same time as the social presence. This is carried out by considering the characteristics of the learners, choosing the appropriate means of computer communication, and applying the appropriate teaching elements to the course design.

Cui et al. (2018) Crowding Learning Communities: Characteristics of Content Related Interactions and Social Connections in MOOC Discussion Forums. This mixed-method study used social network analysis (SNA) and inductive qualitative analysis to compare social relationships and the underlying interactions they represent in discussions related and unrelated to the learning of course content in a statistics MOOC. He also looked at the impact of how social relationships are conceptualized (though the definition of network links) on the resulting network structures and properties. Using a previously developed natural language classifier, 817 threads having 3124 discussion posts from 567 forum participants were characterized as either related to the course content or not. Content, non-content, and shared interactive networks are built on five different link definitions: direct response, asterisk, direct response + asterisk, limited coexistence, and full coexistence. The results show that the properties of the network are robust to differences in link definitions, with the notable exception of comparing content and non-content networks reveals significant differences at the network, community, and (individual) node levels. At the (personal) level the two networks consisted of largely different people, and participants in the content network and communities had more repeated interactions with a larger number of peers. Analysis of the contributing threads helped to explain factors leading to some of these differences, showing the content discussions to be more diverse and complex in their communication purposes, conversation structures, and participants' interaction techniques. In the content discussions, the network of learners around each of the two practitioners had distinct characteristics that seemed linked to the facilitator's approach. Finally, a group of learners tightly connected through content discussions showed nascent learning community-like characteristics. This work contributes to the literature by (1) deepening understanding of MOOC discussion learning processes; (2) drawing connections between network structures and specific discussion practices; (3) supplying evidence demonstrating the importance of separately examining the content and noncontent discussions; and (4) drawing attention to the empirical impact of the choice of tie definition in SNA studies of MOOC forums.

Barysh Horzum (2017) Interactions, Structure, Social Presence and Satisfaction in Online Learning. There have been numerous studies on interaction, structure, social presence, and satisfaction with online learning. However, there are no studies suggesting a relationship between these concepts. The purpose of this article is to investigate the relationship between these variables. The study involved 205 university students enrolled in undergraduate programs at the University of Ankara. Structural equation modelling was used to test the hypothesis. The results of this study show that there is a negative correlation between the price structure defined by Moore in the transaction distance theory and the size of the interaction. Second, the social existence of online students was positively expected through interaction and negatively expected through process structure. Satisfaction with online learning due to social presence was also positively expected. Students are more satisfied with their higher social status in e-learning.

Leimeister et al. (2016) Are virtual communities important to patient social support? Fictional Background and Results. Reason - The motivation behind this paper is to investigate whether online networks meet their capability of giving conditions in which social connections can be promptly set up to assist patients with adapting to their illness through friendly help. The paper intends to create and test a model to inspect forerunners of the development of virtual connections of malignant growth patients inside virtual networks (VCs) as well as their belongings as friendly help. Plan/technique/research - Data were gathered from individuals from virtual patient networks on the German-talking web through an internet-based review to which 301 disease patients answered. The information was investigated utilizing the demonstration of the primary condition of the smallest fractional square (SDP). Discoveries - Virtual patient connections are found in CVs and assume a key part in gathering the social necessities of patients. Significant determinants for the arrangement of virtual connections inside virtual networks for patients are general web utilization power (dynamic posting as opposed to sneaking) and the apparent hindrances of CMC. The paper likewise found that virtual connections emphatically affect the virtual help of patients; over 61% of the change of scene social guide of malignant growth patients was made sense of by disease-related VCs. Basic encouragement and data trade conveyed through these virtual connections might assist patients with bettering adapt to their disease. Research impediments/suggestions - as opposed to earlier research, known determinants for the arrangement of virtual connections (for example conjugal status, instructive status, orientation, and sickness related factors like the sort of malignant growth as control factors, as well as broad web utilization intentions, and saw benefits of CMC as immediate determinants) assumed a powerless part in this investigation of German disease patients. Studies on other patient populaces (for example patients with other intense sicknesses in different societies) are expected to check whether results stay predictable. Common-sense ramifications - Participants and directors of patient VCs have remarkable plan measures to improve VCs for patients (e.g., concerning local area the executives, individual ways of behaving, and the utilization of data in web-based networks). When the social instruments occurring in internet-based networks are better perceived, the methodical upgrade of online networks as per the necessities of their clients ought to be given need. Creativity/esteem - little exploration has been led to analyzing the job of VCs in friendly connections and interpersonal organizations overall and patients specifically. The set of experiences and impacts of virtual patient connections have not been concentrated either hypothetically or observationally enough to be better perceived. This examination consolidates different determinants and impacts of virtual connections from earlier related research. These are integrated into a calculated model and applied exactly to another interest group, i.e., patient CVs.

Kim, (2016) Exploring the relationship between adolescent self-esteem and the offline and online social world. Recent research shows that socializing online is an important aspect of adolescent life and development. This study was conducted

with offline adolescents (i.e., "real life"), the online social world, and self-image as a general indicator of well-being in adolescence. In this quantitative study, 733 adolescents aged 10-18 years ( $M = 15$ ,  $SD = 2.33$ ) were asked about their social world and their online and offline self-images. Regression analysis showed a moderating effect of online communication on the relationship between offline social life and overall self-image, consistent with the "rich get richer" hypothesis of online use.

Wang et al. (2013) social support and social interaction bonds in Internet addiction: Integration of online and offline contexts This study integrates online and offline social gatherings to examine the relationship between social support and social interaction bonds in Internet addiction. Explore relationships. A total of 1,642 members of online social communities took part in this research, and structural equation modeling was used for analysis. Results prove that social support is positively associated with social interaction links in both online and offline contexts. Additionally, online social support and online social interaction links are positively associated with Internet dependency, while offline social support and social interaction links on Internet dependency are negatively associated. This finding has a significant impact not only on the understanding of the cause of Internet dependency but also on the understanding of the decline in Internet dependency due to social support and social interaction links.

Gijselaers et.al. (2012) The job of feelings and errand importance in Virtual Education. This article dissected the job of feelings in a virtual world (Second Life) by the degree of tomfoolery and weariness of the understudies and their effect on their degree of accomplishment. The virtual world was an instructive device used to inundate understudies in the educational program completely. As well as supporting earlier examination on the significance of undertaking esteem on scholarly delight, the momentum research gives another point of view on the connection between scholastic feelings and scholarly achievement, especially for virtual universes. A relapse investigation was directed to quantify the connection between task worth and feelings on two kinds of scholastic execution: Individual test scores and group scores on their Second Life task. The Pekrun Academic Emotions Questionnaire (AEQ) estimated two scholarly feelings: fatigue and delight. The two schools' feelings were estimated according to a singular perspective. The consequences of this review show that the worth of the errand was emphatically connected to joy and adversely connected to weariness, however, it didn't have anything to do with school execution. While happiness had a positive relationship with test execution, weariness additionally had a positive relationship with the group task led in the virtual world. The likelihood that understudies could have addressed the AEQ connecting with the hypothetical parts of the course rather than the down-to-earth parts of the Second Life Assignment, might be one potential clarification for this outcome.

G.B. Roberts et.al. (2010) Utilization of Social Network Sites and Instant Messaging Does Not Lead to Increased Offline Social Network Size, or to Emotionally Closer Relationships with Offline Network Members The impact of Internet use on friendly connections is as yet merely an extraordinary discussion. This study inspected the connections between the utilization of web-based entertainment (texting and interpersonal organization locales), network size, and profound closeness in an example of 117 people who matured 18 to 63 years of age. Time spent utilizing virtual entertainment was related to a bigger number of online interpersonal organization "companions." However, time spent utilizing web-based entertainment was not related to bigger disconnected organizations or feeling sincerely nearer to disconnected network individuals. Moreover, individuals who utilize web-based entertainment don't have bigger disconnected networks and are not sincerely nearer to disconnected individuals from the organization contrasted with individuals who don't utilize web-based entertainment. These outcomes highlight the significance of considering time and likely mental constraints in disconnected web-based entertainment while analyzing the effect of web-based entertainment use on friendly connections.

Kwok (2010) Can be learning to be virtually boosted? An investigation of online social networking impacts. Online social networking has profoundly permeated university campuses, influencing many aspects of student life. We study the impacts of individual involvement in social media (for example, on Facebook) from an educational point of view. Based on the theory of social learning, we argue that two processes of socialization, social acceptance, and acculturation, bridge the gap between individual involvement in online social networks and three areas of social learning outcomes. The results of a survey accompanied by focus group discussions prove the significant impact that engaging university students in online social networking have on the processes and outcomes of social learning. Online social networking not only directly influences university students' learning outcomes but also helps the students reach social acceptance from others and adapt to university culture, both of which play prominent roles in improving their learning outcomes.

Oakley et. Al. (2010) Scaling Online Education: Increasing Access to Higher Education. Over the past decade, online courses and entire online degree programs have been made available, serving millions of students in higher education. These online courses largely have been designed and taught using the theoretical concepts and practical strategies of Asynchronous Learning Networks (ALN). During 2003-04, approximately two million learners were engaged in higher education via ALN, and online enrolments are expected to grow at a 20% annual rate during the next few years. The Sloan Consortium (Sloan-C) has worked to help institutions improve the quality of their online offerings, and research has shown that ALN is a viable alternative to classroom-based learning. This paper reviews online enrolment trends in higher education, describes the characteristics of online programs that have scaled successfully to meet increasing demand, identifies challenges impacting the continued growth of online enrolments in this sector, and outlines the opportunities for increasing access to higher education through scaling of online initiatives.

Mitchell (2010) Approaching Common Ground: Defining Quality in Online Education. The notion of quality in regard to teaching and learning has always been highly debatable. Is it best measured by qualitative or quantitative measures? Summative or formative assessments? Comparative or independent studies? As someone deeply involved with online education for many years, the author continues to seek definitive answers. During her time as director of distance education for a medium-sized community college, she focused on quantitative data, namely, comparisons of retention rates and student grades between online and on-site classes. Those

numbers illustrated that online courses had a higher attrition rate than on-site courses and that there was no significant difference between the final grades of students in either set of courses. Yet quality remains a primary concern of everyone involved with online education. Quality assessment still relies on measuring outcomes often using completion rates of courses and programs.

Layton et.al (2010) The quality and quantity of individuals' social relationships has been linked not only to mental health but also to both morbidity and mortality. This meta-analytic review was conducted to determine the extent to which social relationships influence risk for mortality, which aspects of social relationships are most highly predictive, and which factors may moderate the risk. Across 148 studies, the random effects weighted average effect size was  $OR=1.50$ , indicating a 50% increased likelihood of survival for participants with stronger social relationships. This finding remained consistent across age, sex, initial health status, cause of death, and follow-up period. Significant differences were found across the type of social measurement evaluated ( $p<0.001$ ); the association was strongest for complex measures of social integration and lowest for binary indicators of residential status. The influence of social relationships on risk for mortality is comparable with well-established risk factors for mortality.

Knoester (2010) Independent Reading and the 'Social Turn': How Adolescent Reading Habits and Motivation Relate to Cultivating Social Relationships. Research suggests that independent reading outside of school is a strong indicator of school and reading success. However, studies also suggest that student recreational reading significantly decreases in the middle school years. This article explores some of the reasons adolescent students choose to read independently or are reluctant to do so. In this teacher research study, the author interviewed his former students, their parents, and their current teachers about what motivates adolescents to read or not to read. Evidence from this study suggests that independent reading is intimately connected to various social practices, despite commonly held views that describe independent reading as a solitary activity. Teaching strategies to encourage student motivation are shared.

Tichaona et.al. (2010) Social relationships and identity online and offline: a study of the interplay between offline social relationships. Based on in-depth focus group and individual interviews, this thesis examines how Rhodes University students from socially disadvantaged backgrounds experience campus social life and how they subsequently use Facebook to perform, represent and negotiate their social identities. The study discusses utopian and dystopian positions and interrogates these theoretical perspectives in relation to the students' Facebook usage. The popularity and uptake of Facebook by students from disadvantaged backgrounds, such as those here at Rhodes University, is a growing phenomenon, provoking questions about the relationship between social experiences, social identity and social networks. Rhodes University's social space has been identified by previous studies as modern, liberal, "elite" and divided along race and class lines. The students also experience and adopt modern and liberal elements in their lifestyles which are permitted within the Rhodes University social space. The thesis found that Facebook offers a platform which facilitates a social connectivity that influences how students perform their identities in relation to their offline social identities and lived social experiences. This study concludes that the mediated symbolic materials for the construction and negotiation of identity provided by Facebook are sometimes in tension with the demands of traditional subjectivities experienced by these students at Rhodes University.

Campbell (2010) The Relationship of Loneliness and Social Anxiety with Children's and Adolescents' Online Communication

Children and adolescents now communicate online to form and/or maintain relationships with friends, family, and strangers. Relationships in "real life" are important for children's and adolescents' psychosocial development; however, they can be difficult for those who experience feelings of loneliness and/or social anxiety. The aim of this study was to investigate differences in usage of online communication patterns between children and adolescents with and without self-reported loneliness and social anxiety. Six hundred twenty-six students ages 10 to 16 years completed a survey on the amount of time they spent communicating online, the topics they discussed, the partners they engaged with, and their purposes for communicating over the Internet. Participants were administered a shortened version of the UCLA Loneliness Scale and an abbreviated subscale of the Social Anxiety Scale for Adolescents (SAS-A). Additionally, age and gender differences in usage of the online communication patterns were examined across the entire sample. Findings revealed that children and adolescents who self-reported being lonely communicated online significantly more frequently about personal and intimate topics than did those who did not self-report being lonely. The former was motivated to use online communication significantly more frequently to compensate for their weaker social skills to meet new people. Results suggest that Internet usage allows them to fulfil critical needs of social interactions, self-disclosure, and identity exploration. Future research, however, should explore whether or not the benefits derived from online communication may also facilitate lonely children's and adolescents' offline social relationships.

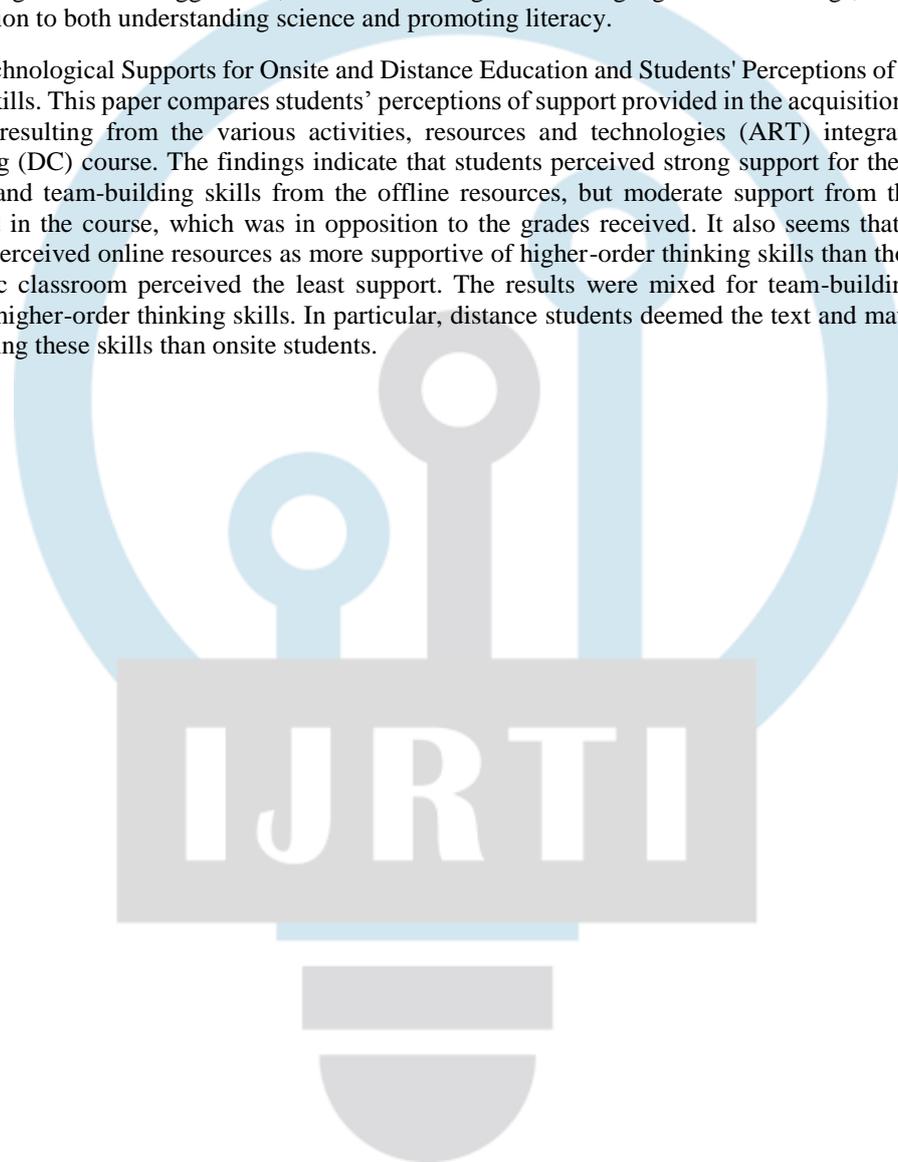
Sener (2010) Why online education will attain full scale. Online higher education has attained scale and is poised to take the next step in its growth. Although significant obstacles to a full-scale adoption of online education remain, we will see full scale adoption of online higher education within the next five to ten years. Practically all higher education students will experience online education in some form during their collegiate career, and college students will be able to take online or blended degree programs and certificates in almost any subject. Full scale online education will occur as the result of compounded growth, increased familiarity and acceptance, various models of scalability, and possible wildcards which may accelerate growth. Online education will also attain full scale by becoming fully integrated into mainstream education. This transformation is necessary for online learning to reach its potential to improve the quality of education.

Farwell (2010) Exploring the Use of Social Bookmarking Technology in Education: An Analysis of Students' Experiences using a Course-specific Delicious.com Account. With more than 4.6 million people, mostly undergraduates, enrolling in at least one online

course in fall of 2008, students are showing that they are comfortable with the concept of technology in education. Many students in online classes, however still have to deal with the high cost of textbooks and supplemental materials. Online technologies, however, can provide other alternatives to costly course packs and textbooks. Faculty and students may be able to replace or supplement course packs and textbooks with social bookmarking sites. This study shows how social bookmarking, specifically Delicious.com, can be used in a course to provide an inexpensive answer to the question of rising course materials costs. Through a series of online focus groups, 53 students enrolled in a “Social Media and Public Relations” course revealed their apprehension toward using an unknown technology and discussed their positive and negative experiences with using the course-specific Delicious.com account. Implications for how social bookmarking can impact online and offline learning are discussed.

Webb (2010) Science Education and Literacy: Imperatives for the Developed and Developing World. This article explores current language-based research aimed at promoting scientific literacy and examines issues of language use in schools, particularly where science teaching and learning take place in teachers’ and learners’ second language. Literature supporting the premise that promoting reading, writing, and talking while “doing science” plays a vital role in effective teaching and learning of the subject is highlighted. A wide range of studies suggest that, whether in homogenous or language-diverse settings, science educators can make a significant contribution to both understanding science and promoting literacy.

Morin et.al (2010) Technological Supports for Onsite and Distance Education and Students' Perceptions of Acquisition of Thinking and Team-Building Skills. This paper compares students’ perceptions of support provided in the acquisition of various thinking and team-building skills, resulting from the various activities, resources and technologies (ART) integrated into an upper-level Distributed Computing (DC) course. The findings indicate that students perceived strong support for their acquisition of higher-order thinking skills and team-building skills from the offline resources, but moderate support from the online resources and technologies provided in the course, which was in opposition to the grades received. It also seems that those in the traditional computer lab setting perceived online resources as more supportive of higher-order thinking skills than those in other sections and those in the electronic classroom perceived the least support. The results were mixed for team-building skills and for offline resources support for higher-order thinking skills. In particular, distance students deemed the text and material in Blackboard less important for developing these skills than onsite students.



## Chapter 3.

### Methodology

#### Aim:

To examine the nature of the Effects of the offline vs online education mode on social relations through a qualitative survey

#### Objective:

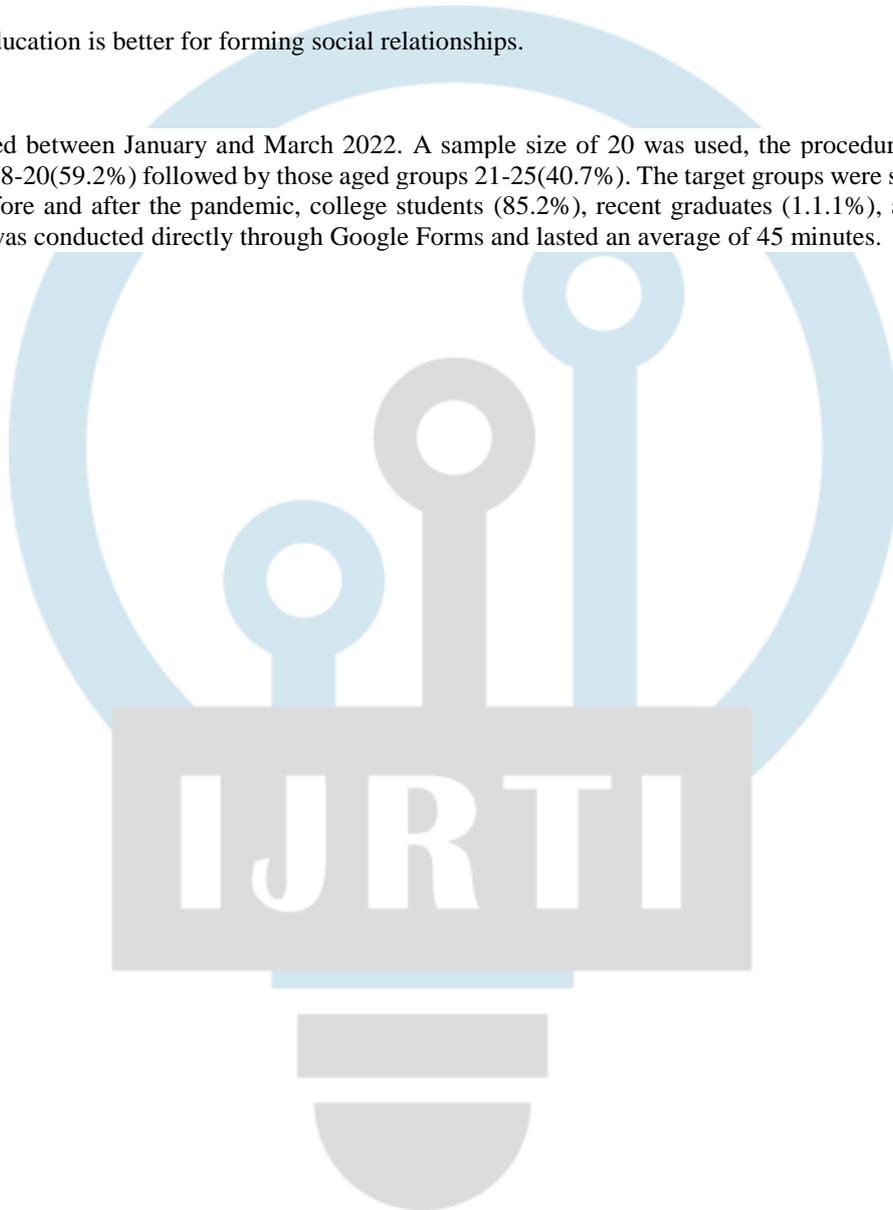
The main purpose of the study was to gather evaluative opinions from school students, university students, and recently graduated students on their experience with offline and online modes of education and their effects on their social relationships

#### Hypotheses:

The offline mode of education is better for forming social relationships.

#### Sample Size

The data were collected between January and March 2022. A sample size of 20 was used, the procedure begins with a random sample of age groups 18-20(59.2%) followed by those aged groups 21-25(40.7%). The target groups were students who took online and offline classes before and after the pandemic, college students (85.2%), recent graduates (1.1.1%), and students (3.7%). As shown, the interview was conducted directly through Google Forms and lasted an average of 45 minutes.



## Chapter 4

## Analysis of Results

4.4 Table 1. Demographic statistics

Variable	Range (value)	Frequency	Percentage
Age	18-20	16	59.2
	21-25	11	40.7
Profession	School student	1	3.7
	College student	23	85.2
	Recently graduate	3	11.1

4.4.4 Table 2: Survey items on Offline v/s Online Education mode

Variable	Scale	Percentage
Are you unhappy of doing so many things alone in a group project due to lack of communication in online education?	Not at all	11.1
	Slightly	18.5
	Moderately	37
	Very	25.9
	Extremely	7.4
How peaceful is the environment at home while learning/attending online classes?	Not at all	18.5
	Slightly	22.2
	Moderately	33.3
	Very	22.2
	Extremely	3.8
How often do u you have one on one discussion with your teacher in online education?	Not at all	48.1
	Slightly	37
	Moderately	14.8
	Very	0
	Extremely	0
I feel left out when we have to form a group for a project	Not at all	33.3
	Slightly	22.2
	Moderately	25.9
	Very	18.5
	Extremely	0
How important is face-to-face communication for you while learning remotely/ online?	Not at all	3.8
	Slightly	18.5
	Moderately	22.2
	Very	29.6
	Extremely	25.9
How helpful are your teachers while studying online	Not at all helpful	11.1
	Slightly helpful	40.7
	Moderately helpful	29.6
	Very helpful	18.5
	Extremely helpful	0
Do you enjoy remote/online learning?	Yes, absolutely	25.9
	Yes, but I would like to change a few things	48.1
	No, there are quite a few challenges	11.1
	No, not at all	14.8

4.4.4.4 Table 3: Survey items on Effects on Social Relationships

Variable	Scale	Percentage
How often do you talk to your classmates in online classes?	Not at all	18.5
	Slightly	29.6
	Moderately	11.1
	Very	33.3
	Extremely	7.4
I lack companionship in online education	Yes	40.7
	No	29.6
	May be	29.6
I find myself waiting for people to call or write	Yes	37
	No	29.6
	May me	33.3
There is no one I can talk to	Yes	7.4
	No	70.4
	May be	22.2
I am no longer close to anyone as online education has distanced me socially.	Yes	33.3
	No	25.9
	May be	40.7
My interests and ideas are not shared by those around me	Not at all	14.8
	Slightly	29.6
	Moderately	48.1
	Very	7.4
	Extremely	0
I am unable to reach out and communicate with those around me	Yes	22.2
	No	37
	May be	40.7
My social relationships are superficial	Yes	25.9
	No	33.3
	May be	40.7
I feel isolated from others	Not at all	22.2
	Slightly	37
	Moderately	25.9
	Very	11.1
	Extremely	3.8
Online education has made me unhappy and being so withdrawn	Not at all	18.5
	Slightly	18.5
	Moderately	37
	Very	22.2
	Extremely	3.8
It is difficult for me to make friends in online classes	Not at all	11.1
	Slightly	22.2
	Moderately	33.3
	Very	14.8
	Extremely	18.5
I feel shut out and excluded by others	Yes	22.2
	No	51.9
	May be	25.9
I do feel people are around me but not with me	Not at all	18.5
	Slightly	22.2
	Moderately	40.7
	Very	7.5
	Extremely	11.1

## Chapter 5.

### Discussion

The main purpose of the study was to gather evaluative opinions from school students, university students, and recently graduated students on their experience with offline and online modes of education and their effects on their social relationships. A descriptive approach for data analysis was considered. Responses to the multiple-choice questions were written down and grouped within each question to decide similar answers. Repetitive content of responses was found. Finally, frequency counts of often occurring responses were tabulated and converted to percentages for reporting purposes. The section below describes the detailed findings of the survey. The result of this study shows that face-to-face learning was perceived more positively than online learning in terms of social presence, interaction, satisfaction, and overall quality. Even though online classes were reported to be convenient in terms of saving time, still the students perceived them to be less effective and structured when compared to the classroom mode of learning. Bo Xie (2008) This study examines the interplay between online and offline social relationships by focusing on an understudied social group: older Chinese Internet users. Method. In 2004, there were thirty-three semi-structured open-ended interviews with members of a high-level Chinese Internet community. analysis. Interview data were recorded, transcribed, translated, and coded according to well-known theoretical principles. result. Participants use the Internet to overcome geographic barriers and integrate virtual worlds into their daily lives. Early interactions with online communities encourage people to meet people with similar interests and backgrounds in the real world. Interactions in the physical world help strengthen fragile relationships. result. The online and offline worlds are interactive, and interactions through multiple communication channels are likely to lead to stronger relationships than interactions through a single channel. Barış, Horzum (2017). This study is about interaction, structure, social presence, and satisfaction in online learning; however, there is not any research that is the relationships among these concepts. This paper aims to review the relationship between these variables. The study population involved 205 university students who have enrolled in the undergraduate diploma program at Ankara University. Structural equation modelling was used to test the hypotheses. The results of this research show that there is a negative correlation between the price structure and the interaction dimensions defined by Moore in the transactional distance theory. Second, the social presence of online students was positively expected through interaction and negatively through course structure. In addition, satisfaction with online learning was positively expected through social presence. Students are more satisfied when their social presence is elevated in eLearning. Najib et al. Effects of offline and online learning during the COVID-19 pandemic (2022). The purpose of this study is to determine the effectiveness of offline learning and e-learning using a two-way analysis of variance. The subjects in this study were undergraduate students of FKIP PGRI Banyu Wangi University from the history education study program. The quasi-Experimental Design method consists of two groups, either online or offline, that cannot fully operate to control external variables that may affect the experience. Students in the Faculty of Teacher Education and Training account for up to 132 students. Based on the results of the two-way ANOVA test, a significant result of  $0.056 > 0.05$  was obtained, it can be concluded that there is no difference between Learning Effectiveness based on study programs at the teaching and education faculty at PGRI Banyuwangi University. but if seen from the results of the significance of  $0.00 < 0.05$ , it can be concluded that there is a difference between the effectiveness of learning based on teaching methods in the faculty of teacher training and education science at the PGRI Banyuwangi university Method: In this qualitative content analysis, 22 semi-structured interviews were conducted with 8 professors and 14 students from the medical school. Jerome. Participants were selected through selective sampling. For data analysis, an inductive content analysis methodology was used. The accuracy of qualitative information was tested using Guba and Lincoln criteria. result. Five main categories were extracted from the data. Opportunities to use virtual networks in education, include improving communication skills; promoting learning; Strengthening and facilitating clinical procedural research. create research questions and patient education. Four main categories of issues were also identified in the use of virtual networks in education, including the accuracy and reliability of the information. security and privacy; appropriate contextualization and culture-building; Control and monitoring of virtual networks. conclusion. Based on the data obtained, the unique opportunities and challenges associated with the use of virtual networks in education were studied. Finding ways to solve these opportunities and challenges, and problems and turn them into opportunities can lead to effective virtual learning, especially for learners who primarily use this learning method, thus improving the quality of learning. Leimeister et al. Are virtual communities important to patient social support? Fictional Background and Results (2016). Reason - The motivation behind this paper is to investigate whether online networks meet their capability of giving conditions in which social connections can be promptly set up to assist patients with adapting to their illness through friendly help. The paper intends to create and test a model to inspect forerunners of the development of virtual connections of malignant growth patients inside virtual networks (VCs) as well as their belongings as friendly help. Plan/technique/research - Data were gathered from individuals from virtual patient networks on the German-speaking web through an internet-based review to which 301 disease patients answered. The information was investigated utilizing the demonstration of the primary condition of the littlest fractional square (SDP). Discoveries - Virtual patient connections are found in CVs and assume a key part in gathering the social necessities of patients. Significant determinants for the arrangement of virtual connections inside virtual networks for patients are general web utilization power (dynamic posting as opposed to sneaking) and the apparent hindrances of CMC. The paper likewise found that virtual connections emphatically affect the virtual help of patients; over 61% of the change of scene social guide of malignant growth patients was made sense of by disease-related VCs. Basic encouragement and data trade conveyed through these virtual connections might assist patients with bettering adapt to their disease. Research impediments/suggestions - as opposed to earlier research, known determinants for the arrangement of virtual connections (for example conjugal status, instructive status, orientation, and sickness related factors like the sort of malignant growth as control factors, as well as broad web utilization intentions, and saw benefits of CMC as immediate determinants) assumed a powerless part in this investigation of German disease patients Studies on other patient populaces (for example patients with other intense sicknesses in different societies) are expected to check whether results stay predictable. Common-sense ramifications -

Participants and directors of patient VCs have remarkable plan measures to improve VCs for patients (e.g., concerning local area the executives, individual ways of behaving, and the utilization of data in web-based networks). When the social instruments occurring in internet-based networks are better perceived, the methodical upgrade of online networks as per the necessities of their clients ought to be given need. Creativity/esteem - little exploration has been led to analyzing the job of VCs in friendly connections and interpersonal organizations overall and patients specifically. The set of experiences and impacts of virtual patient connections have not been concentrated either hypothetically or observationally enough to be better perceived. This examination consolidates different determinants and impacts of virtual connections from earlier related research. These are integrated into a calculated model and applied exactly to another interest group, i.e., patient CVs. Kim, Exploring the relationship between adolescent self-esteem and the offline and online social world (2016). Recent research shows that socializing online is an important aspect of adolescent life and development. This study was conducted with offline adolescents (i.e., "real life"), the online social world, and self-image as a general indicator of well-being in adolescence. In this quantitative study, 733 adolescents aged 10-18 years ( $M = 15$ ,  $SD = 2.33$ ) were asked about their social world and their online and offline self-images. Regression analysis showed a moderating effect of online communication on the relationship between offline social life and overall self-image, consistent with the "rich get richer" hypothesis of online use.



## Chapter 6

### Conclusion

Higher education in India is currently limited by the lack of precision when it comes to setting up online education systems. Teachers and students working hard on an online classroom program, structure, level of communication between students and teachers, quality and quantity of classroom content, technical support, and comprehensive knowledge of online classroom delivery contribute to overall teaching, learning, and social skills. Relationships that decide the eventual success or failure of the online education model. Therefore, we feel the importance of public relations when they are far away. Responses were given to student facilitators for the fact that there was a lack of communication, a lack of friendships, isolation from other classmates/peers, feelings of isolation, and social relationships were high because of online education. On the other hand, when we talk about offline education most students want to go back face-to-face with the education system as communication with classmates and teachers is very effective, and there are no negative feelings of lack of communication, lack of relationships, isolation from other students/peers, feelings of isolation, and relationships social media is becoming more and more involved in offline education. Online education is still the new beginning of the education system in India, and it requires many tests and mistakes to make a better place to keep students and teachers active in the classroom and socially. Although the size of the sample is small enough to take a broad view of the number of people in offline higher education, the information can clarify the common problems students face during online classes. The online mode of higher education is in the initial stages of development in India, so clarity about the problems they face, and the expectations of students will help to plan effective and methodical approaches for learning online classes. It is important to note that the survey showed consistency between offline and online education in students' feelings of online teaching mode and community relations. The views of both were considerate and supportive. Limitations Faculty members and students said that through online learning modalities they were unable to teach and learn practical and clinical work. They could only teach and assess the knowledge component. Due to a lack of immediate feedback, teachers were unable to assess students' understanding during online lecturing. The students also reported limited attention span and the resource-intensive nature of online learning as a limitation. Some teachers also mentioned that during the online study, students misbehaved and tried to access online resources during assessments. Recommendations Teachers and students suggested continuous faculty development. They recommended a reduction in cognitive load and increased interactivities during online teaching. Those in clinical years suggested ways to start online Case Based Learning. However, some were also of the opinion that there should be revision classes along with psychomotor hands-on teaching after the COVID-19 pandemic is under control. To enhance quality, they suggested buying premium software and other proctoring software to detect cheating and plagiarism. Limitations of the Study As the study participants belonged only from Delhi University and Amity University, therefore the findings are only applicable to similar contexts. For generalizability, a survey based on our findings should be conducted across the province or country. Despite the limitations, the findings offer an understanding of the advantages, limitations, and recommendations for improvement in online learning, which is the need of the day.

## Chapter 7

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