

Social Interaction of Students with Gadget: Patterns and Experiences during School Time

Airlangga Auliarachman Diadi *, Muhamad Fadhil Nurdin & Wahyu Gunawan

Universitas Padjajaran, Bandung, Indonesia

rangga633@gmail.com

ARTICLE HISTORY

Received : 2023-04-14

Revised : 2023-07-05

Accepted : 2023-07-07

KEYWORDS :

Communication

Experiences

Gadget

Patterns

School time

Social interaction



ABSTRACT

Technological advancements have rapidly impacted society, transforming the way gadgets are utilized for social interaction. Among students, the use of gadgets for socializing has been on the rise. However, differences in interaction patterns between gadget-mediated and face-to-face interactions have yet to be fully understood. Therefore, this study aims to investigate student social interaction activities through gadgets and in real-life settings. Additionally, the research explores social interaction patterns and experiences among students at SMA IT Plus Bina Bangsa Sejahtera Bogor, a high school that initially prohibited smartphone use during learning but later modified their policy prior to the Covid-19 pandemic. A descriptive qualitative approach was employed, utilizing observation, documentation, and interviews with 30 randomly selected respondents. The study was conducted over a two-month period, from January to February 2023, at SMA IT Plus Bina Bangsa Sejahtera Bogor. The analysis reveals that gadget-mediated interaction patterns involve cooperation, accommodation, assimilation, acculturation, competition, and opposition. Prolonged gadget usage for extended hours was observed, emphasizing their significance in students' lives. Interpretation of gadget-mediated text messages sometimes leads to misunderstandings. However, communication differences between virtual and face-to-face interactions were minimal, as both modes effectively addressed problems. This research deepens our understanding of student social interaction dynamics and highlights the impact of gadget usage on interpersonal communication. It provides insights for schools, families, and policymakers to enhance positive gadget usage and improve the quality of student interactions.

1. Introduction

Advancements in technology and information have brought about significant developments in various aspects of life, characterized by the emergence of sophisticated technological tools and applications. One such tool that has gained immense popularity and widespread usage globally is the gadget, particularly smartphones (Nana, 2013). According to a report by Newzoo (2020), the number of gadget users worldwide has reached 3.6 billion people. By 2021, this number rose to 5.3 billion people, accounting for approximately 67% of the global population. Indonesia, in particular, stands out as one of the countries with the highest number of gadget users, reaching 167 million people in 2020, which amounts to 89% of the

Indonesian population (Newzoo, 2020). The COVID-19 pandemic has further accelerated the reliance on gadgets for work and educational activities (Hanum, 2021).

Gadgets, when utilized appropriately, offer various benefits in the realm of education, particularly for students. Jannah (2017) highlights several advantages, including the integration of learning references, providing a platform for learners to connect and share information through technologies such as email, mailing lists, chatting, and blogging, facilitating teaching and learning initiatives, serving as tools to overcome sensory limitations, and being integral components of curriculum frameworks and teaching methodologies.

Presently, technological tools have become inseparable from students' lives. Observations conducted at Bina Bangsa Sejahtera Islamic High School in Bogor city reveal that a majority of students utilize gadgets to communicate and interact with others (KPAI, 2020). A survey conducted by KPAI (2020) in Indonesia further substantiates this, with 79% of school students reported to be using gadgets intensively, particularly among upper school (SMA) students. Similarly, all students at the Integrated Islamic High School Bina Bangsa Sejahtera Bogor City employ gadgets for communication purposes. Moreover, a study by Rahmandani, et al. (2018) found that high school students spend an average of 3 to more than 7 hours daily on social media platforms.

These data indicate that students spend a considerable amount of time using gadgets for various purposes. However, it is crucial to recognize that students also engage in direct social interactions with individuals in their immediate surroundings, including family, peers, and friends at school. Direct social interaction plays a vital role in students' development of social thinking, encompassing their understanding of relational problems and acquisition of social skills (Samadifard, 2018; Ognibene & Collins, 1998; Hupcey, 1998). Notably, the patterns and forms of social interaction among children have shifted from real-world interactions to virtual environments.

Communication serves as a means to interpret others' behavior, facilitate cooperation among individuals or groups, and occasionally lead to conflicts arising from misunderstandings (Soekanto, 2012). Further, Yohana (2021) asserts that students who heavily rely on gadgets for social interactions exhibit distinct patterns of social interaction compared to those who are less dependent on gadgets. These social interaction patterns encompass cooperation, competition, and even dissension. Disputes may eventually find resolution, albeit temporarily, through an accommodation process where both parties involved may not be entirely satisfied (Sudjarwo, 2011).

Don Ihde's theory emphasizes the interconnectedness between humans and technology, elucidating four forms of human experiences with technology: stature, hermeneutics, differences, and backgrounds. These experiences shape individuals' perspectives and transform their daily lives. Embracing diversity becomes an essential aspect of leveraging technology, hermeneutics entails the interpretation of technological objects to facilitate activities, differences refer to changes in behavior resulting from the sensations experienced when using technology, and backgrounds represent preferred technological contexts (Lim, 2008). Don Ihde's theory provides a framework to examine the impact of technology on human existence, including the social interactions of students (Yohana, 2021).

Although research on student interaction with gadgets exists, no comprehensive exploration of the patterns and experiences of students in conducting social interactions through gadgets at SMA IT Plus Bina Bangsa Sejahtera, Bogor City, an Islamic-based high school, has been undertaken. The choice of this school is based on its location in Bogor sub-district, Bogor Regency, West Java Province, and its substantial student population across various age groups. Additionally, all students at this school possess gadgets and have experienced distance learning through online platforms during the COVID-19 pandemic. The habitual use of gadgets for learning and communication has become deeply ingrained among every student at the school.

Considering the background outlined above, this study aims to investigate the social interaction activities of students carried out through gadgets and in face-to-face settings. Additionally, it seeks to determine the patterns of social interaction and student experiences while at SMA IT Plus Bina Bangsa Sejahtera Bogor. Consequently, this research holds significant importance in understanding the social behavior patterns of students with gadgets, enabling schools, families, and communities to enhance positive gadget usage and improve students' quality of education. The vision and mission of SMA IT Plus Bina Bangsa Sejahtera Bogor City, which emphasizes building a generation with morality and intellect towards technology, underlie the need for such research. By harnessing technological developments, meaningful benefits can be harnessed for the nation, religion, and state.

2. Method

This descriptive qualitative study aims to explore the patterns and experiences of social interaction among students at SMA IT Plus Bina Bangsa Sejahtera Bogor City during the 2022/2023 academic year. The study was conducted over a two-month period from January to February 2023, using various research techniques to ensure valid and reliable results.

The participants of this study were students from classes X, XI, and XII at SMA IT Plus Bina Bangsa Sejahtera Bogor City, a high school that initially prohibited smartphone use during learning but later modified their policy prior to the Covid-19 pandemic. A total of 30 respondents were randomly selected from these classes. Additionally, interviews were conducted with educators and education staff at SMA IT Plus Bina Bangsa Sejahtera, Bogor City, to gather additional insights.

Data collection involved three techniques: interviews, observations, and documentation. Open-ended interviews were conducted, allowing for multiple interactions with the respondents to gain a comprehensive understanding. The interview process followed a general interview guideline, adapting the

questions based on the context and situation of the respondents. Observations were employed to systematically record and document observable phenomena. Initially, broad descriptive observations were conducted to establish a general understanding of the social context. Subsequently, focused and selective observations were performed to narrow the research focus. Field notes were utilized to record the observations. While, documentation was used to collect data from existing records and documents. Written materials and films served as supplementary sources. A documentation record format was created to facilitate data collection and ensure consistency.

Qualitative data analysis was carried out using the framework proposed by Miles and Huberman (1994), involving continuous analysis at each stage of the research to ensure completeness. Data triangulation was employed to enhance the validity of the findings. This involved cross-validation of data through interviews, observations, and documentation to ensure the reliability and credibility of the research data.

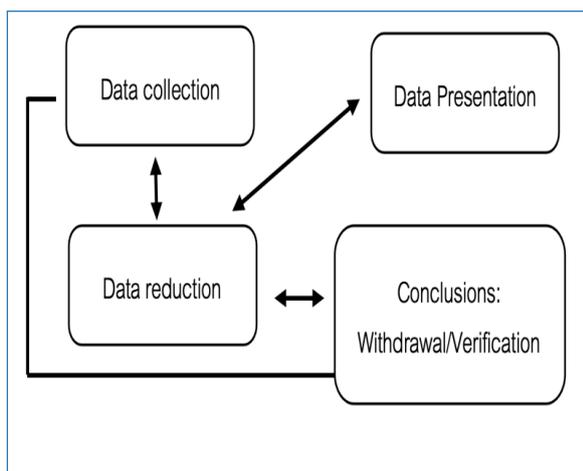


Figure 1. Data analysis techniques

Overall, this research method aimed to comprehensively investigate the social interaction patterns and experiences of students using gadgets at SMA IT Plus Bina Bangsa Sejahtera Bogor City. The findings are expected to contribute to the improvement of students' social behavior through positive gadget use, aligning with the school's vision and mission of nurturing morally upright and technologically adept individuals who can contribute to the betterment of the nation, religion, and state.

3. Result

This study aims to investigate the social interaction activities of students carried out through gadgets and in face-to-face settings. Additionally, it seeks to determine the patterns of social interaction and student experiences while at SMA IT Plus Bina Bangsa Sejahtera Bogor which is located on Jl. Raya Dranaga Km. 7 Bogor, West Java, Indonesia.

3.1 Students' Social Interaction

Gadget User

Social interaction is a necessity for every human being because through interaction a relationship will be created between two or more human beings who can meet each other's necessities of life. The process of social interaction through gadgets in this high school began at the time of the outbreak of Covid-19. This is because before the Covid-19 pandemic occurred, SMA IT Plus Bina Bangsa Sejahtera had implemented a policy whereby gadgets/mobile phones could not be used in teaching and learning activities where gadgets/mobile phones were placed in the vice principal's room. Considering that during the Covid-19 pandemic, gadgets/mobile phones were very much needed, the SMA IT Plus Bina Bangsa Sejahtera in Bogor City made a policy to conduct learning through internet networks.

Observations show the students at this high school have shown a strong attachment to gadgets, particularly after the Covid-19 pandemic. Even when learning is not conducted through smartphones, many students still use them for various activities that foster cooperation, accommodation, and assimilation among gadget users. These activities can be academic or non-academic in nature, such as playing games or engaging in WhatsApp conversations. The interview data further supports this observation, as it was revealed during the interview session with the respondent identified as RN that students primarily communicate with each other through gadgets.

[...] Nah, aku sih gak ragu buat komunikasi langsung lewat gadget. Praktis banget sih, soalnya aku bisa bikin grup di aplikasi yang aku pake, kayak WhatsApp gitu. Jadi bisa tetap terhubung sama banyak orang sekaligus.

Translation: [...] Well, I personally don't hesitate to communicate directly through gadgets. It's convenient because I can create groups within the applications I use, like WhatsApp. It allows me to stay connected with multiple people at once.

Intv-RN_1'2''

Another student (CT) also mentions the same things:

[...]Gue merasa banget, sih, platform online tuh penting banget buat bikin komunitas-komunitas gitu. Buat gue sendiri, rasanya enak banget karena bisa dapetin sense of belonging dan koneksinya juga kuat banget. Contohnya, di grup-grup sosial media, gue bisa nyambung sama orang-orang yang sama pikirannya, dan bisa berbagi pengalaman serta pendapat gue.

Traslation: [...] Online platforms play a crucial role in creating communities. Personally, I find that they provide a sense of belonging and

connection. For instance, within social media groups, I can engage with like-minded individuals and share my experiences and opinions.

Intv-CT_4'5''

In fact the rest of the 15 of the respondents also stated a slightly similar data that they did not hesitate to communicate directly, because by communicating with gadgets they could create groups within the applications they used, such as WhatsApp. This is in line with what RN that said that he has a lot of time to play gadgets, sometimes even doing online games together.

[...] aku habiskan banyak waktu main gadget, sih. Kadang-kadang, kita main game online bareng-bareng, gitu. Itu cara buat kita sosialisasi dan bonding sama temen-temen, deh [...]

Translation: [...] I spends a lot of time playing gadgets. Sometimes, we even play online games together. It's a way for us to socialize and bond with friends [...]

Intv-RN_5'15''

The same thing was also conveyed by FS that communicating through gadgets can reduce feelings of awkwardness if there is a need with the opposite sex, besides that he also admitted that communicating with gadgets can save time and energy because he can come or meet face to face if he has made an appointment so don't wait. Long and more confident.

[...] Jelas banget, sih. Menurut aku, komunikasi lewat gadget bisa ngurangin rasa canggung, apalagi pas lagi interaksi sama lawan jenis. [...] Bikin kita merasa nyaman dan gampang, gitu. Nah, pas ada kebutuhan buat ngomong sama seseorang dari lawan jenis, pake gadget justru bikin aku bisa ekspresi diri dengan lebih percaya diri. Hilangin sedikit tekanan sosial yang biasanya ada pas interaksi tatap muka, gitu loh.

Translation: [...] Of course. I believe that communicating through gadgets can reduce feelings of awkwardness, especially when it comes to interactions with the opposite sex. [...] It provides a sense of comfort and ease [...] Well, when there's a need to communicate with someone of the opposite sex, using gadgets allows me to express myself more confidently. It removes some of the social pressure that comes with face-to-face interactions.

Intv-FS_3-5'

It doesn't stop here, based on the results of the documentation and observations regarding the study groups formed by the teacher, the students get to know each other through gadgets so that in the end they don't hesitate to meet face to face anymore. This provides

information that the process of student interaction through gadgets at SMA IT Plus Bina Bangsa Sejahtera is going well if it continues to be encouraged to use technology wisely, as stated by R, one of the teachers at SMA IT Plus Bina Bangsa Sejahtera, that the students at school are all have a gadget and can communicate well, as TR mentions in the interview:

[...] hal ini sangat menarik. Kami mengamati bahwa ketika siswa saling mengenal melalui gadget, mereka menjadi lebih nyaman dan kurang ragu-ragu untuk bertemu secara langsung. Seperti halangan awal kecanggungan sosial yang terurai melalui interaksi virtual. Hal ini telah menyebabkan terbentuknya hubungan yang lebih kuat dan persahabatan di antara para siswa.

Translation [...] It's been quite remarkable, actually. We've observed that as the students get to know each other through gadgets, they become more comfortable and less hesitant to meet in person. It's like the initial barrier of social awkwardness is broken down through virtual interactions. This has led to stronger connections and friendships among the students.

Intv.TR_R-5'5''

In line with this, VY as a class XI student also provided information that he has close friends of about 4 people who are members of the WhatsApp group and are close even when talking face to face. That through the gadget their softly assimilate and accommodate among studntes from different backgrounds in the schools.

Tentu dong! Gue tuh, sebagai anak kelas XI, punya temen dekat sekitar empat orang. Kita semua ada di grup WhatsApp dan persahabatan kita enggak cuma sebatas interaksi digital aja, tapi juga nyambung banget saat kita ketemu langsung. Menariknya, smartphone dan gadget kita jadi alat penting buat menjaga ikatan kita. Dari perangkat itu, kita bisa dengan mudah berinteraksi dan nyambung sama orang-orang dari beragam latar belakang di sekolah kita.

Translation: [...] of course. As a class XI student, I have a close group of friends consisting of around four individuals. We are all members of a WhatsApp group, and our friendship extends beyond digital interactions. Even when we meet face to face, we maintain a close bond. It's interesting to note that our smartphones and gadgets have played a significant role in facilitating our connections. Through these devices, we have been able to easily interact and assimilate with people from diverse backgrounds within our school.

Intv-VY_4'-25''

Slightly similar TP, RA provides information if the process of interaction through gadgets sometimes gives

misunderstandings if the writing is not very clear so that the misunderstanding sometimes carries over to the real world and causes bad feelings, but if it is immediately resolved it can get better again.

[...] Aku punya sekitar empat teman dekat yang juga anggota grup WhatsApp. Kami sering berkomunikasi lewat grup itu, dan bahkan ketika ketemu langsung, persahabatan kami tetap kuat.

Translation: [...] I have about four close friends who are also members of the WhatsApp group. We communicate regularly through the group, and even when we meet in person, our friendship remains strong.

Intv-TP_5'15''

[...] Kalau pesan teks atau chat-nya nggak jelas, bisa bikin salah paham. Kadang-kadang salah paham itu juga berlanjut ke pertemuan langsung kita, bikin suasana jadi kurang enak di antara kita. Tapi kalau kita langsung ngomongin masalahnya dan klarifikasi apa yang bikin bingung, hubungan kita bisa membaik lagi.

Translation: [...] When the text messages or chats are not very clear, it can result in misunderstandings. These misunderstandings sometimes carry over to our offline interactions, leading to negative feelings between us. However, if we address the issue immediately and clarify any confusion, our relationships can improve again.

Intv-RA_2'10''

The results from the interviews and observation indicate that the use of gadgets, particularly smartphones, has become an integral part of the social interaction among students at SMA IT Plus Bina Bangsa Sejahtera. Prior to the Covid-19 pandemic, the school had strict policies against gadget usage during teaching and learning activities. However, the outbreak of the pandemic necessitated a shift towards online learning, leading to the adoption of smartphones and internet networks for educational purposes. These data reveals that students at the school heavily rely on gadgets, especially smartphones, for various activities beyond academic purposes. They utilize platforms like WhatsApp to create groups and stay connected with multiple people simultaneously. This technological facilitation has allowed them to foster cooperation, accommodation, and assimilation among themselves, despite coming from diverse backgrounds. It is worth noting that these interactions occur not only virtually but also during face-to-face meetings, indicating the strengthening of friendships both online and offline.

The interviews further highlight the benefits of gadget-mediated communication. Students express that communicating through gadgets reduces feelings of awkwardness, especially when interacting with the opposite sex. It provides them with a sense of comfort, ease, and confidence, as they can express themselves

more freely compared to face-to-face interactions. Additionally, gadgets are seen as time-saving tools, allowing individuals to communicate efficiently and avoid long waiting times for face-to-face meetings.

The findings also suggest that gadgets have facilitated the formation of study groups and increased familiarity among students. By getting to know each other through gadgets, students become more comfortable and less hesitant to meet in person. The initial social barriers and awkwardness are gradually overcome through virtual interactions, leading to the establishment of stronger connections and friendships. However, it is important to note that gadget-mediated communication is not without challenges. Students CT RA, TP, ST mention that *Competition and Opposition or Contravention* sometimes easier to create with gadgets among the students

[...] Iya, nih. Salah satu tantangan yang aku perhatikan adalah makin banyak persaingan dan perlawanan yang muncul ketika komunikasi melibatkan gadget di antara teman-teman sebaya. Kayaknya dengan akses ke gadget, jadi lebih gampang deh konflik atau perbedaan pendapat muncul. Mungkin karena gadget memberikan platform di mana kita merasa lebih nyaman mengungkapkan pendapat yang berseberangan atau terlibat dalam diskusi yang kompetitif. [...] Iya, misalnya pas kerja kelompok atau diskusi online, aku perhatikan ada momen di mana siswa saling berlomba buat pendapat mereka didengar atau coba saling mengalahkan satu sama lain. Kayak ada kebutuhan terus-menerus buat membuktikan diri atau dianggap lebih tahu atau mampu daripada yang lain. Lingkungan yang kompetitif ini kadang-kadang menghambat kolaborasi yang efektif dan menciptakan ketegangan yang nggak perlu.

Translation: [...] Yes, certainly. One of the challenges I've noticed is the increased competition and opposition that arises when gadgets are involved in communication among students. It seems that having access to gadgets makes it easier for conflicts or disagreements to arise. Maybe it's because gadgets provide a platform where students feel more comfortable expressing opposing views or engaging in competitive discussions. [...] Sure. For instance, during group projects or online discussions, I've observed instances where students compete to have their ideas heard or try to outdo one another. It's like there's a constant need to prove oneself or be seen as more knowledgeable or capable than others. This competitive environment can sometimes hinder effective collaboration and create unnecessary tension.

Intv-RA_3'10''

[...] Salah satu tantangan besar yang saya perhatikan adalah munculnya perlawanan atau

pertentangan di antara para siswa ketika menggunakan gadget dalam komunikasi. Tampaknya penggunaan gadget somehow memudahkan munculnya pandangan yang bertentangan atau ide-ide yang saling konflik. Mungkin karena siswa merasa lebih berdaya untuk mengekspresikan diri melalui gadget, dan ini kadang-kadang mengarah pada bentroknya pendapat. [...] Saya pernah melihat siswa-siswa berdebat atau bertengkar melalui aplikasi pesan atau platform online. Debat-debat ini kadang-kadang berubah menjadi diskusi yang memanas, dengan siswa-siswa mempresentasikan sudut pandang yang berseberangan dan saling melempar tantangan terhadap ide-ide satu sama lain. Meskipun debat yang sehat bisa menjadi produktif, kemudahannya berkomunikasi melalui gadget kadang-kadang membuat konflik semakin memanas dan sulit menemukan titik temu atau mencapai kesepakatan yang sama.

Translation: [...] One significant challenge I've noticed is the creation of opposition or contravention among students when gadgets are involved in communication. It appears that the use of gadgets somehow facilitates the emergence of opposing views or conflicting ideas. It might be because students feel more empowered to express themselves through gadgets, and this sometimes leads to clashes in opinions.[...] I've noticed instances where students engage in debates or arguments over messaging apps or online platforms. These debates can sometimes turn into heated discussions, with students presenting opposing viewpoints and challenging each other's ideas. While healthy debates can be productive, the increased ease of communication through gadgets can sometimes escalate these conflicts and make it harder to find common ground or reach consensus.

Intv-TP_3'10''

[...] Salah satu tantangan yang saya amati adalah munculnya persaingan dan pertentangan antar siswa saat menggunakan gadget untuk komunikasi. Kayaknya gadget memberi kesempatan buat siswa-siswa ini buat bersaing atau memperlihatkan pendapat yang berseberangan. Dinamika ini kadang bikin proses komunikasi jadi rumit, sih. [...] pas siswa-siswa ngobrol lewat gadget, ada kecenderungan beberapa orang buat terus-terusan nyoba nunjukin diri mereka lebih hebat daripada yang lain. Seakan-akan mereka butuh bukti atau pengakuan atas dominasi mereka dalam percakapan. Mentalitas persaingan ini kadang-kadang ngebuat kerjasama dalam komunikasi jadi tersisihkan dan malah menciptakan atmosfer persaingan antar siswa, yang sebenarnya bikin efeknya jadi nggak produktif di situasi tertentu.

Translation: [...] One challenge I've observed is the creation of competition and opposition among students when using gadgets for communication. It seems that gadgets provide a platform where students can easily compete with each other or express opposing views. This dynamic can sometimes complicate the overall communication process. [...] when students communicate through gadgets, there is a tendency for some individuals to constantly try to outdo each other. It's as if they feel the need to prove themselves or establish their dominance in the conversation. This competitive mindset can sometimes overshadow the collaborative aspects of communication and create an atmosphere of rivalry among students, which can be counterproductive in certain situations.

Intv-ST_3'15''

The findings from the interviews conducted with students and observation during the data collection period shed light on the challenges associated with gadget-mediated communication among students. The common theme that emerges from their responses is the ease with which competition, opposition, or contravention can arise when using gadgets for communication.

One notable observation is the increased competition and opposition that students perceive when using gadgets to communicate. The presence of gadgets seems to create an environment where conflicts or disagreements can easily arise. The students suggest that this may be attributed to the platform that gadgets provide, which allows individuals to express opposing views more comfortably or engage in competitive discussions. During group projects or online discussions, it becomes apparent that students compete to have their ideas heard or attempt to outshine one another. There is a constant need to prove oneself or be seen as more knowledgeable or capable than others. This competitive environment hampers effective collaboration and can lead to unnecessary tension, potentially hindering the overall communication process.

Furthermore, the use of gadgets appears to facilitate the emergence of opposition or contravention among students. Gadgets empower students to express themselves more freely, which sometimes leads to clashes in opinions. The ease of communication through gadgets, particularly messaging apps or online platforms, can escalate debates or arguments into heated discussions. Students present opposing viewpoints and challenge each other's ideas, making it harder to find common ground or reach consensus. The competitive mindset prevalent in gadget-mediated communication can overshadow the collaborative aspects of communication, creating an atmosphere of rivalry among students. This dynamic can complicate the overall communication process and be counterproductive in certain situations.

4.2 Students Experiences: Social contact and Social Communication.

4.2.1 Social Contact Experience

Regarding the dimension of whether students have close friends, the observation and interviews revealed that the respondents had varying numbers of close friends. Many participant stated that they have about 5 close friends or more close friends. These excerpts highlights this findings:

[...] *Yaudah deh. Gue punya sekitar 5 temen dekat. Udah kenal lama banget, sering hangout bareng juga. Mereka kayak keluarga kedua buat gue. [...] selain jadi support system juga bikin gue merasa beneran gabung. Mereka ngerti gue dan nerima gue apa adanya. Enak sih tau kalo gue bisa mengandalkan mereka*

Translation: [...] Sure. I have about 5 close friends. We've known each other for a long time, and we hang out together regularly. They're like a second family to me.[...] Having close friends provides a support system and a sense of belonging. They understand me and accept me for who I am. It's comforting to know that I can rely on them.

Intv-FZ_3'15''

Nah, gue punya sekitar 7 temen dekat nih. Kita udah kenal dari zaman SD, dan sampe sekarang tetep erat. Kita sering kumpul bareng dan asik barengan. [...] Kita sempet tinggal deketan pas tahun pertama sekolah, dan langsung nyambung aja gitu. Kita jadi dekat gara-gara pengalaman yang sama dan minat yang mirip. Lama-lama, kita jadi kayak kelompok yang erat banget [...] Pastinya dong. Temen dekat tuh nyediain dukungan emosional dan bantu kita hadapi segala suka dan duka hidup. Mereka kayak keluarga tambahan, dan gue selalu bisa mengandalkan mereka.

TranslationL [...] Well, I have about 7 close friends. We've known each other since primary school, and we've stayed close ever since. We meet up regularly and enjoy each other's company. [...] We were in the same neighbour during our first year, and we just clicked. We bonded over shared experiences and common interests. Over time, we became like a tight-knit group [...] Absolutely. Close friends provide emotional support and help us navigate through life's ups and downs. They're like an extended family, and I can always count on them.

Intv-DP_2'15''

Concerning whether siblings and peers can interact well through gadgets, both individually and in groups, the majority of the respondents expressed that they can interact well. They mentioned reasons such as feeling comfortable communicating through gadgets,

finding it easier and faster to share school-related information, being able to gather friends quickly into social media groups and have discussions together, developing a unique chemistry through gadget communication, and overcoming technical misunderstandings together. These findings clearly expressed in these excerpts:

[...] menurutku sih, saudara-saudara dan teman-teman pasti bisa interaksi dengan baik lewat gadget. Udah jadi hal yang umum banget buat kita berkomunikasi lewat perangkat kayak smartphone dan laptop. Enak dan nyaman buat kita. Kita bisa dengan mudah berbagi info sekolah, ngobrol bareng teman-teman di grup, bahkan bantu selesaikan masalah teknis bareng-bareng. Menurutku, pake gadget udah bantu kita bangun komunikasi yang unik. [...] Pake gadget bikin komunikasi jadi lebih cepat dan gampang. Kita bisa langsung kumpulin teman-teman di platform media sosial dan ngobrol bareng. Hemat waktu dan tenaga deh. Terus, kalo kita ada kesalahpahaman teknis atau kesulitan, kita bisa selesainya bareng-bareng. Kayak pengalaman bersama yang bikin kita makin dekat.

Translation: [...] I believe that siblings and peers can definitely interact well through gadgets. It's become quite common for us to communicate through devices like smartphones and laptops. It's convenient and comfortable for us. We can easily share school-related information, chat with friends in group conversations, and even solve technical issues together. I think using gadgets has helped us develop a unique chemistry in our communication. [...] Using gadgets has made communication faster and easier. We can quickly gather our friends on social media platforms and have discussions together. It saves us time and effort. Also, when we face technical misunderstandings or difficulties, we can tackle them together. It's like a shared experience that brings us closer.

Intv-TI_2'15''

However, some participant also mentioned that interactions through gadgets with peers do not always go smoothly. They pointed out delays in responses to urgent and important questions, technical misunderstandings related to voice intonation or chat typing, and other factors affecting communication through gadgets.

Regarding the dimension of whether siblings and peers can interact well face-to-face, both individually and in groups, all respondents unanimously stated that they can interact well. They mentioned reasons such as having established good relationships with their friends, finding it easier to communicate and solve problems or tasks, finding face-to-face interactions more enjoyable and engaging, experiencing fewer misunderstandings, and feeling a stronger sense of chemistry with their conversation partners.

[...] dari pengalaman pribadi gue, gue pernah ngalamin beberapa masalah pas ngobrol lewat gadget. Kadang-kadang ada delay dalam dapetin respons buat pertanyaan yang penting dan mendesak, yang bisa bikin kesel. Selain itu, sering ada kesalahpahaman teknis, terutama soal intonasi suara atau ngetik chat. Ini semua punya dampak pada komunikasi secara keseluruhan lewat gadget-gadgetan kita [...] adik-adik dan temen-temen sebaya kita bisa berinteraksi dengan lancar banget pas ketemu langsung. Ada beberapa alasan kenapa hal ini bisa terjadi. Pertama, kita udah punya hubungan yang kuat sama temen-temen kita, jadi lebih gampang buat komunikasi dan ngeresolusi masalah bareng atau ngerjain tugas bareng. Selain itu, interaksi langsung itu lebih seru dan bikin engaged dibandingkan interaksi lewat gadget. Kita ngalamin lebih sedikit kesalahpahaman karena kita bisa liat ekspresi dan bahasa tubuh satu sama lain. Lebih dari itu, kita juga merasa lebih nyambung dan ada chemistry yang lebih kuat pas ngobrol sama orang langsung.

Translation: [...] from my personal experience, I have encountered some issues during interactions through gadgets. There have been delays in getting responses to urgent and important questions, which can be frustrating. Additionally, there are technical misunderstandings that arise, especially related to voice intonation or chat typing. These factors have an impact on the overall communication through gadgets [...] siblings and peers can interact very well face-to-face. There are several reasons for this. Firstly, we already have established good relationships with our friends, which makes it easier to communicate and solve problems or tasks together. Additionally, face-to-face interactions are more enjoyable and engaging compared to interactions through gadgets. We experience fewer misunderstandings since we can see each other's expressions and body language. Moreover, there's a stronger sense of chemistry with our conversation partners when we interact in person.

Intv-TI_2'15''

Slightly similar findings, some participants also mentioned that interactions through gadgets with peers do not always go smoothly. They pointed out delays in responses to urgent and important questions, technical misunderstandings related to voice intonation or chat typing, and other factors affecting communication through gadgets.

Sementara interaksi melalui gadget bisa memudahkan, tapi nggak selalu lancar. Aku sendiri udah mengalami beberapa tantangan. Misalnya, ada keterlambatan dalam mendapatkan respons atas pertanyaan penting dan mendesak,

yang bisa bikin kesel kadang-kadang. Selain itu, ada juga kesalahpahaman teknis yang bisa muncul, terutama dalam menafsirkan intonasi suara atau pesan chat. Faktor-faktor ini berpengaruh pada efektivitas komunikasi melalui gadget.[...] bersaudara dan teman sebaya berinteraksi sangat baik secara tatap muka. Ada berbagai alasan di balik ini. Pertama, kita udah membangun hubungan yang kuat dengan teman-teman kita, yang membuat komunikasi dan pemecahan masalah jadi lebih mudah. Selain itu, interaksi tatap muka cenderung lebih menyenangkan dan seru dibandingkan interaksi melalui gadget. Kita mengalami lebih sedikit kesalahpahaman karena bisa mengandalkan isyarat non-verbal dan lebih memahami perasaan satu sama lain. Ada juga rasa kimia dan koneksi yang lebih kuat ketika kita berbicara langsung. AS, dan DP

Translation: While interactions through gadgets can be convenient, they are not always smooth sailing. I've come across a few challenges myself. For instance, there are delays in receiving responses to urgent and important questions, which can be frustrating at times. Moreover, there are technical misunderstandings that can arise, particularly when it comes to interpreting voice intonation or chat messages. These factors have an impact on the effectiveness of communication through gadgets.[...] siblings and peers interact exceptionally well face-to-face. There are various reasons behind this. Firstly, we have already built strong relationships with our friends, which makes communication and problem-solving much easier. Additionally, face-to-face interactions tend to be more enjoyable and engaging compared to gadget-mediated interactions. We experience fewer misunderstandings since we can rely on non-verbal cues and have a better understanding of each other's emotions. There's also a stronger sense of chemistry and connection when we engage in direct conversations.

Intv-DP_2'15''

Regarding face-to-face interactions, all respondents based on the interview data and observation unanimously stated that siblings and peers can interact well, both individually and in groups. They mentioned reasons such as having established good relationships with their friends, finding it easier to communicate and solve problems or tasks, finding face-to-face interactions more enjoyable and engaging, experiencing fewer misunderstandings, and feeling a stronger sense of chemistry with their conversation partners.

Therefore, through this data clearly highlights that the social contact factor for student interactions through gadgets at SMA Plus Bina Bangsa Sejahtera in Bogor City can be divided into four main areas: having close friends, having peer groups, being able to interact well through gadgets (both individually and in groups), and being able to interact well face-to-face (both individually and in groups). Furthermore, the respondents expressed that they can interact effectively with peers through gadgets, except for a few who highlighted occasional challenges. Lastly, all respondents agreed that they can interact well face-to-face with their peers, citing various reasons.

4.2.2 Social Communication Experiences

Communication is essential for social interaction as it facilitates the exchange of messages. This section focuses on the social communication factor in student interactions through gadgets at SMA Plus Bina Bangsa Sejahtera in Bogor City. The study collected data that shed light on various aspects of this phenomenon, including participants' self-perceived proficiency in communicating through gadgets with their peers, challenges encountered in gadget-mediated communication with peers, difficulties experienced in direct face-to-face communication with peers, typical responses from peers when communicating through gadgets (i.e., whether they respond or remain silent), and typical responses from peers during direct face-to-face communication (i.e., whether they respond or remain silent). The following excerpts highlight participants' responses during the interview session:

Gue punya kemampuan komunikasi yang oke banget kalo urusan ngobrol pakai gadget sama temen-temen gue. [...] Gue merasa PD banget dengan kemampuan gue buat ngarahin pembicaraan ke arah yang diinginkan dan menentukan nada yang pas buat komunikasi yang efektif. [...] Bener! Gue pake berbagai aplikasi pesan, platform media sosial, dan alat panggilan video buat tetep terhubung sama temen-temen gue. [...] Kita saling tuker pesan, berbagi foto dan video, dan bahkan sering banget video call berkelompok buat update kabar dan bahas topik-topik yang berbeda. Itu jadi bagian penting dalam interaksi sehari-hari kita, dan gue merasa nyaman banget mainin platform-platform ini. [...] Gue cuma mau ngegarisbawahi aja, kemampuan komunikasi kayak gini bantu gue banget buat menjalin hubungan yang kuat dan tetep terhubung sama temen-temen gue. Ini juga ngebantu gue buat mengekspresikan diri secara efektif dan tetep terhubung sama dunia digital. Gue percaya kemampuan-kemampuan kayak gini itu penting banget di masyarakat sekarang.

Translation: I have excellent communication skills when it comes to using gadgets to interact with my peers. [...] I feel confident in my ability to steer discussions in the desired direction and set

the right tone for effective communication. [...] Sure! I use various messaging apps, social media platforms, and video calling tools to stay connected with my friends. [...] We exchange messages, share photos and videos, and even have group video calls to catch up and discuss different topics. It's an integral part of our daily interactions, and I feel comfortable navigating these platforms. [...] I just want to emphasize that being skilled in this type of communication has helped me foster strong relationships and maintain connections with my peers. I believe these skills are essential in today's society.

Intv-AL_2'15''

Aku PD banget komunikasi pake gadget. Punya banyak temen, interaksi digital. [...] Praktis ekspresikan pikiran dan ide. Komunikasi lewat gadget, hati-hati pilih kata, mikirin respon. Biar pembicaraan positif dan menghormati. Gak ada batasan waktu atau fisik, bisa fokus ke topik tertentu. Pakai WhatsApp, Facebook, Instagram buat konek sama temen. Berbagi pesan, foto, voice memo. Pilihan komunikasi yang efektif.

[...] I feel confident in my ability to communicate effectively using gadgets. [...] I find it convenient and efficient to express my thoughts and ideas using gadgets. [...] Well, when we communicate through gadgets, I can carefully choose my words and think through my responses. This helps me set the tone of the conversation in a positive and respectful manner. Additionally, since we are not bound by time or physical constraints, I can direct the discussions towards specific topics or share relevant information [...]. These platforms provide us with a range of options to communicate effectively.

Intv-SC_2'5''

Gue percaya kalo jago ngomong pake gadget itu makin penting di jaman digital sekarang. Bisa bikin hubungan tetep terjaga, kita bisa ngungkapin diri dengan jelas, dan ikutan diskusi yang bermakna. Kalo kita bisa ngebangin skill ini, bisa bantu banget buat pertumbuhan pribadi dan karir di dunia modern ini.

Translation: I believe that being skilled in gadget-mediated communication is becoming increasingly important in our digital age. It allows us to maintain connections, express ourselves clearly, and engage in meaningful conversations. Developing these skills can contribute to personal and professional growth in the modern world.

Intv-DP_2'15''

Regarding whether respondents consider themselves skilled in communicating through gadgets with peers, the majority of the respondents expressed that they feel skilled. They mentioned having many

friends and being active in gadget-mediated interactions. They also believed they could set the tone and direction of discussions effectively. Furthermore, regarding difficulties in communicating through gadgets with peers, majority respondents mentioned experiencing challenges. They cited misunderstandings, delayed responses, signal disruptions, difficulty reaching friends, and misinterpretations of intonations as factors contributing to these challenges. The excerpts below highlights the context.

Gue sering bingung komunikasi sama temen-temen pake gadget. Ada beberapa alasan kenapa. Pertama, suka ada miss-komunikasi. Kadang pesan gak nyampein maksud yang sebenarnya, jadi bikin bingung atau salah paham. Bikin bete deh kalo lagi nyoba jelasin sesuatu, tapi temen lainnya malah nangkep yang salah. [...] Masalah lainnya itu jawaban yang lama banget. Kadang gue kirim pesan, temen-temen lama banget balasnya. Bikin kesel banget, [...] Gangguan sinyal juga jadi masalah gede. Kadang internet atau sinyal jaringan lemah, itu pengaruh ke kualitas komunikasinya. [...] Susah banget juga nyampein temen-temen kadang-kadang. Kadang gak ada yang online, atau gadgetnya dimatiin. Bikin kesel aja kalo lagi butuh ngobrol penting atau cuma pengen ngobrol. Rasanya koneksinya gak selalu bisa diandelin.

Translation: I often find it difficult to communicate effectively with my friends using gadgets. There are several reasons for this. First, there are often misunderstandings. Sometimes, the message doesn't convey the intended meaning, and it leads to confusion or misinterpretation. It's frustrating when you're trying to explain something, but the other person gets the wrong idea. [...] Another problem is the delayed responses. Sometimes, I send a message, and it takes a long time for my friends to reply. It can be quite annoying, [...] Signal disruptions are a big issue too. There are times when the internet or the network signal is weak, and it affects the quality of the communication. [...] I find it challenging to reach my friends at times. Sometimes, they're not available, or they have their gadgets turned off. It can be frustrating when you need to discuss something urgently or when you simply want to talk to them. It feels like the connection is not always reliable.

Intv-MR_3'15''

Concerning difficulties in direct face-to-face communication with peers, 10 respondents reported experiencing challenges. These challenges included misunderstandings, punctuality issues, excessive joking, inappropriate topics (SARA-related), and lack of enthusiasm during discussions.

Gue sering banget nemuin masalah komunikasi langsung sama temen-temen gue. Salah satu masalah utamanya adalah kebingungan. Kadang-kadang, apa yang gue maksudin gak nyampe dengan jelas, jadinya bikin bingung dan penafsiran pesan gue jadi berantakan. [...] Pernah suatu waktu gue lagi diskusi proyek kelompok sama temen-temen gue, gue ngasih saran pendekatan yang beda buat ngatasi masalah. Tapi saran gue malah salah dimengerti sebagai kritik terhadap ide mereka, yang akhirnya bikin tegang di antara kita. [...] Masih ada beberapa tantangan lainnya. Masalah keterlambatan itu sering banget. Beberapa temen gue sering datang telat buat rapat atau janji, jadinya bikin keterlambatan dan gangguan di diskusi kita. [...]

Translation: I have encountered several challenges when communicating face-to-face with my peers. One major issue is misunderstandings. Sometimes, what I intend to say doesn't come across clearly, leading to confusion and misinterpretation of my message. [...] There was a time when I was discussing a group project with my peers, and I suggested a different approach to solve a problem. However, my suggestion was misunderstood as criticism of their ideas, which caused tension among us.[...], there were a few more challenges. Punctuality issues were quite common. Some of my peers would often arrive late for meetings or appointments, causing delays and disruptions in our discussions.[...]

Intv-OF_5'13''

[...] Lebay-ngelawak jadi masalah lain. Humor sih bisa jadi bagian positif dalam komunikasi, tapi kadang-kadang kelewatan banget pas lagi ngobrol. Bikin gangguan dan susah buat fokus pada topik yang lagi dibahas. [...] Iya, kita pernah beberapa kali ngalamin diskusi yang jadi ngarah ke topik yang nggak pantas, kayak SARA (Sex, Alcohol, Religion, and Politics). Bikin bingung dan tegang di antara anggota grup, soalnya topik-topik ini bisa sensitif dan bikin perpecahan. [...] Kadang ada teman-teman sebaya yang keliatan nggak tertarik atau kurang semangat pas lagi ngobrol. Bikin susah buat diskusi yang seru dan produktif kalo nggak semua orang ikutan aktif.

Translation: [...] Excessive joking was another issue. While humor can be a positive aspect of communication, it sometimes went overboard during our discussions. It led to distractions and made it difficult to maintain focus on the topic at hand. [...] Yes, we had a few incidents where discussions veered into inappropriate topics related to SARA (Sex, Alcohol, Religion, and Politics). It created discomfort and tension among

the group members, as these topics can be quite sensitive and divisive. [...] there were instances where some peers seemed disinterested or lacked enthusiasm during our conversations. It made it challenging to have engaging and productive discussions when not everyone was actively participating.

Intv-AL_5'13''

The study conducted at SMA Plus Bina Bangsa Sejahtera in Bogor City revealed important findings regarding social communication among students using gadgets. Firstly, most participants considered themselves proficient in direct communication with peers, as indicated by their extensive social networks. They believed that face-to-face interaction allowed for more diverse discussions. However, a subgroup of respondents reported difficulties in communicating through gadgets, citing issues such as misunderstandings, signal disruptions, delayed responses, and challenges related to interpreting intonation. On the other hand, some participants did not encounter any difficulties in gadget-mediated communication.

In terms of direct face-to-face communication, challenges were observed among a portion of the participants. These challenges included misunderstandings, punctuality issues, excessive joking, and inappropriate conversations. However, a number of participants did not face any difficulties in this mode of communication. It is worth noting that most participants reported that their peers typically responded during both gadget-mediated and face-to-face communication. However, a few participants mentioned minimal response or silence, often attributed to their peers' preoccupation with gadgets or a lack of response.

These findings provide valuable insights into the social contact and communication experiences of students using gadgets at SMA Plus Bina Bangsa Sejahtera in Bogor City. The study highlights the complexities involved in different modes of communication and emphasizes the importance of understanding and addressing the challenges that students may encounter during interpersonal interactions.

4. Discussion

The objective of this study is to examine the social interaction activities of students, both through gadgets and in face-to-face settings, at SMA IT Plus Bina Bangsa Sejahtera Bogor focusing on the patterns of social interaction and explore the experiences of students in these contexts.

4.1 Students' Social Interaction: The patterns

Investigation on social interaction patterns of *Gadget User Students* at SMA Plus Bina Bangsa

Sejahtera Bogor City revealed diverse patterns of social interaction, including cooperation, accommodation, assimilation, competition, and opposition.

4.1.1 Cooperation

The cooperation factor in students' social interactions through gadgets at SMA Plus Bina Bangsa Sejahtera Bogor City reveals interesting patterns. Students engage in cooperative activities such as playing games, chatting, calling, video calling, sharing information, and discussing school lessons (Suzana et al., 2020; Frahasini et al., 2018). Additionally, direct interactions involve watching together, going to the museum, hanging out, going for walks, playing, drinking coffee, taking photos, venting, and participating in community activities (Harfiyanto et al., 2021). These patterns suggest a strong emphasis on collaboration and shared experiences among students.

The cooperation factor plays a significant role in the smoothness of interactions through gadgets. Research shows that students frequently communicate through gadgets with individuals who share similar interests (Harfiyanto et al., 2021). Communication with like-minded individuals or those who have the same goals tends to be easier compared to interactions with new people, as there is already a common understanding and adaptation in the virtual world (Suzana et al., 2020).

4.1.2 Accommodation

Accommodation is an essential aspect of social interactions, involving self-adjustment to overcome tension and conflicts. Students at SMA Plus Bina Bangsa Sejahtera Bogor City exhibit accommodating behaviors, showing kindness, help, care, and understanding towards their peers (Suzana et al., 2020). However, some students face challenges in their interactions, including misunderstandings and delayed responses to messages (Sudjarwo, 2011). Resolving conflicts and misunderstandings requires open communication, explanations, discussions, and sometimes the involvement of mature individuals or family members (Thadi, 2022). It is crucial to address misunderstandings promptly and employ verbal communication to ensure effective resolution.

4.1.3 Assimilation

The process of assimilation, which aims to reduce differences and reach agreements based on common interests and goals, is observed in students' social interactions through gadgets. Some students at SMA Plus Bina Bangsa Sejahtera Bogor City select friends with similar interests or those who are not too open, while others do not prioritize friend selection (KPAI, 2020; Newzoo, 2020). Students' confidence and insecurity levels in interactions can be influenced by factors such as appearance, association, and class rankings (Ririn & Agustina, 2021). The patterns of assimilation and acculturation in social interactions

through gadgets require adjustments and the establishment of comfort between students (Rahmandani et al., 2018).

4.1.4 Competition

Competition is a natural aspect of high school life and can influence social interactions among students. Students engage in various competitive activities, including participating in competitions, seeking social media likes or followers, and striving for academic achievements (Sastroasmoro & Ismail, 2011). However, it is essential to promote positive competition that encourages growth and avoids negative consequences (Rachman et al., 2021). Effective communication, finding solutions, admitting defeat, and maintaining a calm attitude are key strategies for managing competition among students (Rachman et al., 2021).

4.1.5 Opposition or Contravention

Opposition or contravention, characterized by hidden opposition to avoid open disputes or conflicts, is another aspect of students' social interactions through gadgets. While some students report never having conflicts or disputes, others mention disagreements, misunderstandings, and differences of opinion (Muduli, 2014). Resolving conflicts often involves effective communication, seeking solutions, providing clear explanations, and, in some cases, involving third parties or seeking guidance from family members (Ganapathy, 2016). Addressing disputes promptly is crucial to prevent further complications (Jannah, 2017).

4.2 The Students' Social Interactions: Experiences

Gadgets play a significant role in facilitating students' social interactions at SMA IT Plus Bina Bangsa Sejahtera Bogor City. The interviews with students reveal a high dependence on gadgets for social interactions (Yazdanifard & Yee, 2014). Students consider gadgets mandatory for social interaction, as they provide easy communication, quick access to information, and entertainment options such as listening to music, watching videos, and playing games (Chopra et al., 2020). These findings highlight the pervasive presence and importance of gadgets in students' daily lives.

The experiences of students in social interactions through gadgets and face-to-face settings at SMA IT Plus Bina Bangsa Sejahtera Bogor offer valuable insights into the dynamics of their interactions. Perceptions of the similarities and differences between gadget-mediated and face-to-face interactions vary among students. While some find little distinction, engaging in meaningful discussions and maintaining visual contact through video calls (Rahmandani et al., 2018), others face challenges related to voice intonation, facial expressions, body language, and potential misunderstandings in gadget-mediated interactions (Agaton & Cueto, 2021). Meeting in

person is often seen as clearer, more enjoyable, and conducive to direct communication (Agaton & Cueto, 2021). Personal preferences, circumstances, and the nature of the interaction influence the choice between gadget-mediated and face-to-face interactions.

The interviews reveal that students heavily depend on gadgets for social interactions at SMA IT Plus Bina Bangsa Sejahtera Bogor City. Gadgets are considered essential tools for communication, connecting with friends, and accessing information (Yazdanifard & Yee, 2014). Students report using gadgets for social interaction purposes for extended periods, ranging from 2 to 12 hours a day (Chopra et al., 2020). The availability of communication and entertainment features on gadgets makes them attractive and versatile tools for social interactions (Montero et al., 2019). Students interpret gadgets as texts that require understanding and utilization (Hanum, 2021). They make use of various features and applications, such as chat, voice calls, video calls, and file sharing, to engage in social interactions (Widodo & Wartoyo, 2020). These features offer benefits such as ease of communication, quick access to information, and convenient storage of multimedia files (Cox & Cox, 2008). The interpretation and effective utilization of these features enhance students' experiences in social interactions through gadgets.

Gadgets have become an integral part of students' social interactions, often serving as background elements. Students perceive gadgets as tools that facilitate communication, interaction, and entertainment (Yohana, 2021). The convenience and accessibility of gadgets enable students to engage in social interactions anytime and anywhere (Nana, 2013). However, opinions vary among students, with some recognizing the importance of in-person interactions for certain situations and personal connections (Ririn & Agustina, 2021).

4.3 Differences between Gadget-Mediated and Face-to-Face Social Interactions

The examination of students' perceptions regarding the similarities and differences between gadget-mediated interactions and face-to-face interactions offers valuable insights into the dynamics of social interactions. While some students perceive little difference between the two forms, as they can engage in discussions and maintain visual contact through video calls (Rahmandani et al., 2018), others acknowledge the challenges that arise in gadget-mediated interactions, such as voice intonation, facial expressions, body language, and potential misunderstandings (Agaton & Cueto, 2021). On the other hand, meeting in person is often seen as clearer, more enjoyable, and conducive to direct communication (Agaton & Cueto, 2021). The choice between gadget-mediated and face-to-face interactions is influenced by personal preferences, circumstances, and the nature of the interaction.

Gadgets have evolved from being the main focus to becoming background elements in students' social interactions. Many students find gadget-mediated interactions easier, more convenient, and more flexible than face-to-face interactions (FZ, TI, FR, MR, W, DP, ASA, & DH). They appreciate the ability to communicate anytime and anywhere, streamline communication, and stay up to date with technology (Nana, 2013). However, opinions vary among students, with some recognizing the positive aspects of both forms of interaction and acknowledging the importance of in-person interactions for certain situations (Ririn & Agustina, 2021).

In conclusion, this study sheds light on the patterns and experiences of social interactions among students at SMA IT Plus Bina Bangsa Sejahtera Bogor, with a specific focus on interactions through gadgets and face-to-face settings. The findings reveal diverse patterns of social interaction, including cooperation, accommodation, assimilation, competition, and opposition. Gadgets play a crucial role in facilitating social interactions, providing convenience and accessibility. The study's significant contribution lies in its exploration of the differences between gadget-mediated and face-to-face interactions, highlighting the importance of effective communication, interpretation of gadget features, conflict resolution, and understanding in fostering positive and inclusive social environments at school. By understanding these nuances, educators and policymakers can develop strategies to promote healthy and meaningful social interactions.

5. Conclusions

This study sheds light on social interactions among students at SMA IT Plus Bina Bangsa Sejahtera Bogor, specifically focusing on the role of gadgets. The findings reveal key patterns of social interaction, highlighting cooperation, accommodation, assimilation and acculturation, competition, and opposition. The study emphasizes the significant reliance on gadgets for social interactions and the importance of interpreting gadget-mediated communication to avoid misunderstandings. While there are differences between gadget-mediated and face-to-face interactions, both forms are effective in problem-solving and fostering connections among students. This study provides novel insights into social interactions among students at SMA IT Plus Bina Bangsa Sejahtera Bogor, with a specific focus on the role of gadgets. These novel insights contribute to filling a research gap and enhancing our understanding of social interactions in the digital era. The study has important implications for educators, parents, and policymakers in promoting responsible gadget use and fostering supportive social environments in schools. Further research in this field should particularly focus on the significance of interpreting gadget-mediated communication to mitigate misunderstandings.

References

- Agaton, C. B., & Cueto, L. J. (2021). Learning at home: Parents' lived experiences on distance learning during COVID-19 pandemic in the Philippines. *International Journal of Evaluation and Research in Education*, 10(3), 901–911. <https://doi.org/10.11591/ijere.v10i3.21136>
- Chopra, S., Bansal, P., & Bansal, P. (2020). Journal of advanced medical and dental sciences research. *J Adv Med Dent Scie Res*, 8(1), 184-186
- Cox, D. B., & Cox, D. B. (2008). Developing interpersonal and group dynamics through asynchronous threaded discussion: the use of discussion board in collaborative learning. *Education*, 128(4), 553–565.
- Frahasini, Astuti, T. M. P., & Atmaja, H. T. (2018). The impact of the use of gadgets in school of school age towards children's social behavior in semata village. *Journal of Educational Social Studies*, 7(2), 161–168.
- Ganapathy, M. (2016). The effects of using multimodal approaches in meaning-making of 21st century literacy texts among ESL students in a private school in Malaysia. *Advances in Language and Literary Studies*, 7(2), 143-155.
- Hanum, Z. (2021). *Penduduk indonesia gunakan smartphone*. Kemenkominfo.
- Harfiyanto, Doni., Utomo, Cahyo., Budi, T. (2021). Pola interaksi sosial siswapengguna gadget di SMA N 1 Semarang. *Journal of Educational Social Studies*, 4(1), 1–5.
- Herdianto, R., & Syahidin, D. (2020). Gadget & adolescent: Its effect depiction on the daily life. *Bulletin of Social Informatics Theory and Application*, 4(2), 40–51. <https://doi.org/10.31763/businta.v4i2.266>
- Hupcey, J. E. (1998). Clarifying the social support theory-research linkage. *Journal of advanced nursing*, 27(6), 1231-1241.
- Jannah, N. (2017). *Implikasi teknologi informasi pada perilaku sosial dan keagamaan siswa kelas XI (studi kasus madrasah aliyah negeri (MAN) I kota Mojokerto*. Program Pascasarjana Universitas Islam Negeri Sunan Ampel Surabaya.
- KPAI. (2020). *Survei pemenuhan hak dan perlindungan anak pada masa pandemi covid-19*.
- Lim, F. (2008). Filsafat teknologi : Don Ihde tentang dunia, manusia, dan alat. *Penerbit Kanisius*.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. sage.
- Montero, C. S., Kärnä, E., & Ng, K. (2019, June). Digipack Pro: Revamping Social Interactions and Supporting Physical Activity. In

- Proceedings of the 18th ACM International Conference on Interaction Design and Children* (pp. 751-754). <https://doi.org/10.1145/3311927.3326595>
- Muduli, J. R. (2014). *Addiction to technological gadgets and its impact on health and lifestyle: A study on college students* (Doctoral dissertation).
- Nana, S. S. (2013). Perkembangan kurikulum teori dan praktek. *Remaja Rosdakarya*.
- Newzoo. (2020). *Global report*. San Francisco. <https://newzoo.com/>
- Ognibene, T. C., & Collins, N. L. (1998). Adult attachment styles, perceived social support and coping strategies. *Journal of social and personal relationships*, 15(3), 323-345.
- Rachman, A. S., KHB, M. A., & Setianingsih, E. S. (2021). An analysis of the sse of Gadget on students' learning outcome (Case Study). *International Journal of Elementary Education*, 4(4), 558-565.
- Rahmandani, F., Tinus, A., & Ibrahim, M. M. (2018). Analisis dampak penggunaan gadget (smartphone) terhadap kepribadian dan karakter (kekar) peserta didik di SMA Negeri 9 malang. *Jurnal Civic Hukum*, 3(1), 18-44..
- Rahmayani, O., & Nofrialdi, R. (2022). The effect of utilization of social media instagram @nanarfshop on buying interest of fispol students university ekasakti padang. *Journal Of Law Politic and Humanities*, 2(2), 1-10.
- Ririn F. A., & Agustina. (2021). Gadget phenomenon: the effect toward language disorders and social interaction of early childhood. *Journal of Cultura and Lingua*, 2(2), 2013-2015.
- Samadifard, H. R., & Sadri Damirchi, E. (2018). The relationship between perception of social interaction, perceived social support and social acceptance with aggression among adolescents. *Journal of Research and Health*, 8(1), 38-46. <http://dx.doi.org/10.29252/acadpub.jrh.8.1.38>
- Sastroasmoro S., & Ishmael I. (2011). *Dasar-dasar metodologi penelitian klinis* (4th ed.).
- Shelly Alvareza Zazkia, & Fatonah, S. (2021). The influence of gadgets on the development of elementary school children and solutions for parents based on the theory of perenialism. *Sunan Kalijaga International Journal on Islamic Educational Research*, 5(2), 15-27. <https://doi.org/10.14421/skijier.2021.52.02>
- Soekanto, S. (2012). *Sosiologi suatu pengantar*. PT Gravindo Persada.
- Sudjarwo. (2011). *Dinamika kelompok*. CV. Mandar Maju.
- Suzana, S., Munajim, A., Casta, C., Pratama, G., Sulaeman, E., Sukarnoto, T., ... & Karim, A. (2020). Gadget and the internet for early childhood distance learning. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 17(7), 8019-8028.
- Thadi, R. (2022). The effect of gadget use on social interaction on students of uin raden fatah palembang. *Al-Ulum*, 22(1), 23-40.
- Widodo, A., & Wartoyo, F. X. (2020). Lockdown and gadget addicted phenomenon: changes in social behavior of school age children during the covid-19 pandemic in mataram city. *ACM International Conference Proceeding Series*. <https://doi.org/10.1145/3452144.3452163>
- Yazdanifard, R. & Yee, L. T. (2014). Impact of social networking sites on society. *Global Journal of Human Social Science: E-Economics*, 14(8), 47-56.
- Yohana, S. (2021). Pengaruh penggunaan gadget terhadap kemampuan interaksi sosial siswa sekolah dasar. *Jurnal Kewarganegaraan*, 5(1), 276-284.
- Yusnita, T., Adeni, S., & Harahap, M. A. (2022). Online learning and student social interaction in the rural family. *Journal Communication Spectrum: Capturing New Perspectives in Communication*, 12(2), 146-154.