

## Interpersonal Communication Using Personal Sport Device In Forming Community

Vanny Adriani

LSPR Institute of Communication & Business  
Vanny.a@lspr.edu

Chrisdina

LSPR Institute of Communication & Business  
chrisdina@lspr.edu

Deddy Irwandy

LSPR Institute of Communication & Business  
Deddy.i@lspr.edu

### ABSTRACT

Technologies matched the effectiveness of various health activity strategies, such as exercise monitoring, information, and social support. The purpose is to find out that technology has become part of delivering sports information that is used by the applications and devices, creating communication between individuals and devices they used to plan and record sports and exercise routines, physical performance, and record all the activity.

Effective communication can occur if the sender and the recipient have good skills in exchanging the messages. This study may provide an overview of verbal and nonverbal that may occur during communication in sports activities. This manuscript seeks to analyze whether technology Enhances or hinders Interpersonal Communication. George Herbert Mead's symbolic interaction theory is applied in this investigation. It uses a technique that includes a survey of the literature and interviews with certain users of personal sports equipment to examine three fundamental concepts: mind, self, and society. According to the study, a person's capacity to interpret symbols is what makes up their mind. Therefore, everyone must interact to develop their mind and get that meaning. Then, the self is the ability to accept and adapt based on the judgment of another person's point of view. Moreover, an individual in the surrounding environment will deliver people in the process of taking tasks in society; they even can form a community as the same user of personal sports devices.

Using Symbolic interaction theory, humans will perform an action based on the meanings attached to the action. Nevertheless, humans can obtain their purpose from social interaction with others.

**Keywords:** Sport Device, Interpersonal Communication, Community, Symbolic

## INTRODUCTION

We might have identified the impact that the internet has changed the way people organize and connect to the people surrounding them. These developments will continue to impact our understanding of how emerging technologies can improve particular kinds of social involvement. The advent of the Internet altered everything. It affected how people perform business, interact socially, shop, and even spend their free time; all of these have been profoundly affected and modified by society's digitalization. Indeed, the equivalent process that has produced such an upheaval of how people has also fundamentally changed how people follow and engage in sports.

Further, Internet of Things (IoT) and human-computer interface (HCI) have permitted the successful completion of an array of tasks efficiently and timely. Many intelligent and highly engaging platforms for students' PE-based education can use IoT and HCI. The proposed study examined different methods for recognizing athletes in images and videos captured during practice. Wearable and portable devices can develop to monitor a player's health during physical activity.

Modern culture has made sports a way of life, and technology has made it easier for people to use sports equipment. One activity that is a feature of modern society's lifestyle, or what is usually referred to as urbanities, is sports. Sports and lifestyles cannot be separated in any way. As a result, urbanites are provided with several amenities to make it easier for them to exercise, and many investors view opening a fitness center as a viable business. Given that more individuals in Indonesia are becoming aware of healthy lifestyles and that just 1% of the country's population belongs to a fitness center, the prospects for a fitness center serving the B-C market group are even more promising. According to a MarketResearch.com report, the value of the Asia Pacific fitness and health center market will be \$ 21.27 billion in 2018. Irawan Amanko, Chief Executive Officer of ReFIT Indonesia, stated in the article (Suhartadi, 2017) that the market value of the fitness business in Indonesia is "estimated at around Rp. 2-3 trillion per year."

Therefore, the article above explains how the industry of Fitness Centers quickly developed because technological advancements also supported it. One of the fitness centers in Jakarta delivered a bracelet used as a locker lock. The customers at this fitness center attach a bracelet to their hand to place and open the locker during a visit and exercise at the fitness center. However, the bracelet, which is named RFID Wristband, is made of various digital lockers. The RFID Wristband connects to the scanner placed in each studio door at the fitness center; the machine records the presence of members and connects directly to the mobile application. With the application on the cellphone, fitness center members can see various information, class programs, and personal collections of activities carried out.

However, since covid 19 hit the world, people have started to do physical restrictions when leaving the house. So that many activities, especially sports, are carried out at home. Social restrictions, do more activities at home, maintain social distance, and avoid crowds are effective ways to reduce the risk of transmitting COVID-19 outside the

home. The problem is, self-isolation activities at home tend to have a negative effect on a person's mental health. Self-isolation activities accompanied by fear of contracting COVID-19 and excessive exposure to hoax information can have the effect of anxiety and depression. To reduce the boredom and anxiety caused by self-isolation, many people have started trying to establish a pleasant daily routine. One of them, they start sports activities as part of a healthy lifestyle to boost the body's immune system to be immune from virus attacks.

An online survey conducted by Sitohang, M. Y, 2021 said that in early December 2020 with 321 respondents showed that 1 in 5 people who had not previously exercised started exercising during the COVID-19 pandemic. In addition, almost half of the respondents who had been exercising since before the pandemic changed their sports activities for the better. They increase the duration of exercise and increase the type of exercise performed. Sports activities are indeed proven to reduce the effects of stress to maintain immune function because physical activity can reduce the effects of anxiety which in fact continue to haunt us while staying at home. Long before the COVID-19 pandemic occurred, many people had lived a sedentary lifestyle or lacked physical activity which could have a negative impact on health. During the COVID-19 pandemic, running and exercising at home (home workout) were the most popular types of exercise by respondents (79%).

Therefore, exercising at home (for example, home workouts) can be a choice of exercise for those who avoid social interaction in an effort to prevent COVID-19. In practice, exercising at home is included in the category of sports that are safe, easy and inexpensive. This program includes aerobics (e.g. walking around the house or surroundings), strength training, stretching exercises, and a combination of strengthening and stretching muscles. the impact is that the technology products in sports and health are increasing at the industry level, such as sports equipment at fitness centers, sports competitions, health therapy in hospitals and health clinics, and the invention of individual technologies. One of the individual technologies is smartwatches, which connect to mobile health applications. There are many brands of smartwatches that humans use to communicate their sports activities. According to the online magazine menshealth.com, 5 of the best 2019's smart watches are the Apple Watch, Fitbit Versa, Samsung Galaxy Watch, Garmin Vivo Active 3 and Matrix Power Watch X(Lane, 2019).

In addition, the results of research in the United States show that using sports applications on smartphones can provide a "challenging" effect for users. The track record of physical activity in the application features makes users even more challenged to increase their physical activity. For example, in the app feature it is noted that the user has walked 2000 steps today. The next day, users will challenge themselves to be able to do further or at least the same as yesterday (Sitohang, M. Y, 2021).

Interestingly, the habit of exercising independently and using a smartwatch and mobile apps have finally continued until the end of the Covid 19 outbreak. This study explores how satisfied people are with how new sports technology is being used to arrange their sporting activity. The innovation of technology utilized in sport communication, such as watches linked to mobile health apps, was the subject of this study. This study includes

a number of goals, including examining how people communicate their participation in sports via watching sports and using its health applications on mobile devices. That can take many forms of interpersonal communication, not only face-to-face conversations, phone calls or video calls but also how it can move further and make people interact and form communities among the same users. This study assumes that Interpersonal communication is changing. The sport application user can find a new way to communicate. Face-to-face activity may replace an application designed based on individual needs. Interpersonal communication in conventional starting in certain activities needs to be included. Connecting between many devices (sport watch and smartphones) proliferates digital interaction in an internet platform. The designer created the same symbol to build a society with specific interactions.

## LITERATURE REVIEW OR RESEARCH BACKGROUND

### a. *Interpersonal Communication*

Insancamila, Rizqi, and Norhabiba (2022) said that, when there is direct or face-to-face communication between people, it is called interpersonal communication. Message processing can also be referred to as message recipients, in this process what happens is the interpretation of other people's communicative behavior so that the meaning of their behavior can be understood. Next is interaction coordination, which is the process of aligning message production and message processing to produce a smooth exchange. The process of interpersonal communication is followed by social perception, namely capturing events or activities of ourselves, other people, social relations, and social institutions.

Gamble and Gamble said communication may come in two ways: interpersonal or intrapersonal. Interpersonal communication happens where there are at least two persons communicating, exchanging and learning information that helps sustain relationships. Intrapersonal communication is communication within self. It happens if someone thoughts of evaluating within himself; intrapersonal communication does not involve anyone else (Gamble & Gamble, 2022).

The Shanoon-Weaver communication model, as seen below, has six elements to transmit how a message is sent and received. There are a source, message, channel, noise, receiver, and feedback (Fulginiti & Bagin, 2017)

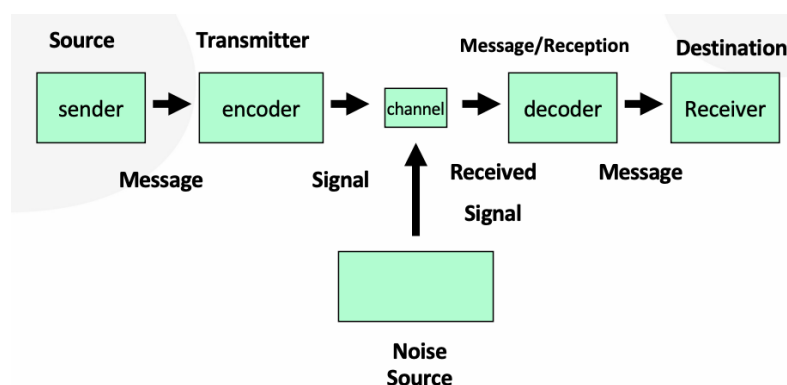


Figure 1 Shannon/Weaver Model (Fulginiti &amp; Bagin, 2017)

The source sends the message; the encoder specifies how to send the message. Then the message will choose the channel. The channel is medium. For example, a tweet would be sent via Twitter to the audience using a computer or a smartphone. The computer or phone is the channel. The next element in the Shannon-Weaver Communication Model is the decoder. It takes the message and arranges it in a proper format. In the example using Twitter, Twitter would be both the encoder and decoder. (Fulginiti & Bagin, 2017). If the communication were one-way, it would stop here. If the communication is two-way, it would have one additional element, feedback. "Feedback is powerful too. Feedback tells the communicator how this message is being received (Broom, 2009, p. 272 in Nelson (2012)).

I.A Richards described that the visual aspect has significant meaning in communication to be able to change one's way of thinking. For example, a person's moment depicted in a photographic figure, visuals can embody one's interpersonal messages and are reflected in one's cognition. In this view, interpersonal communication is defined as the process of creating something that is unique, has meaning, and has an impact on the mind of someone who receives the message (Nurdin, 2020, p.18). Interpersonal communication is the basic thing that humans need because humans are social creatures. Humans need other people to exchange thoughts, information, opinions, and feelings.

#### *b. Symbolic Interaction Theory*

Symbolic interaction is one of many theories in social sciences. This theory claims that facts are based on and directed by symbols. The foundation of this theory is meaning. Symbolic interaction examines the meanings emerging from the reciprocal interaction of individuals in a social environment with other individuals.

This theory was pioneered and developed by George Herbert Mead in 1920-1930, this theory focuses on individual and group interactions, where these individuals interact face to face by using symbols in the form of words, signs, and gestures. Rohim (2016) explained that this theory is influenced by social structures that shape certain behaviors, which in turn affect the formation of symbolization in the process of interaction in social life. Symbolic interaction theory focuses on two things, namely humans in society will never be separated from interactions with others and interactions that occur in society are reflected in certain symbols with dynamic tendencies (Rohim, p. 87).

It focuses on the question, "Which symbols and meanings emerge from the interaction between people?" According to this theory, people live in both natural and symbolic environments. *Symbolic interaction* is a process that enlivens the reciprocal meaning and values with the aid of the symbols in the mind. George Herbert Mead composed three basic ideas among others: Mind, Self and Society (Siregar, 2016).

1. Mind is the ability of a person to make and use symbols that exist to get meaning. Each individual needs to interact in order to develop and acquire that meaning.
2. Self is the ability to accept and adapt by basing it on the judgment of another person's point of view. This theory is one of the theories that examine the self himself and his environment.
3. Society is an interaction relationship between each individual and the surrounding environment that will lead humans to the retrieval process tasks in the community (Siregar, 2016).

In general, Sobur (2016) stated that the theory of symbolic interaction is based on three basic foundations for drawing conclusions, that is, humans will basically perform an action based on the meanings contained in that action. But that meaning can only be obtained from the results of social interaction carried out with other people, and these meanings will indirectly be perfected when the interaction process takes place. Interestingly, on this reserach focus on how that interaction happens throughout the personal devices such as smart watch and mobile apps.

#### *c. Sport Technology 4.0*

The availability of data relating to biomechanical, physiological, and performance characteristics is rising because of new wireless technologies. There seems to be a subliminal belief that gathering factual "big data" is the way to disseminate more pertinent knowledge to advance athletes' health and boost sports performance. Technologies for monitoring athletes are widely used, developing quickly, and aggressively pushed. Compiling, integrating, and separating valuable and pointless material streams has become a daunting challenge as sports organizations are increasingly bombarded with "big data." The monitoring of ever-increasing streams of objective data is the direction that current trends in sports continue to take.

Sports scientists are thus driven to gather a variety of data utilizing a variety of commercially available assessment tools. Professional sports organizations also make significant investments in new technologies (in terms of time, money, and skilled human resources). Instead, there is a commercial motivation to create new technologies and advertise them to practitioners to urge them to see what the new technologies might offer. Accordingly, entrenched and embodied, experience-dependent, and goal-directed performers-environment interactions both direct and constrain sports behavior.

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Most people exercised for 30-60 minutes with a frequency of one to two times a week. Exercise with moderate to vigorous intensity for less than 60 minutes, as practiced by the majority of respondents, is in accordance with the recommendations of the World Health Organization (WHO). Exercise with this pattern is considered effective in boosting the immune system because it stimulates the exchange of different immune cell subtypes between the circulation and tissues. In addition, the habit of exercising at moderate intensity, for about 60 minutes, is the easiest exercise habit to do (Sitohang, M. Y, 2021).

## METHODOLOGY

The research used a qualitative descriptive approach. The researcher also uses the case study method, which is qualitative research, to find the meaning of an activity to investigate what kind of process occurs. The results will examine an in-depth understanding of the individual, group or situation (Emzir, 2016). The case study aims to find out about something in depth. Therefore researchers use this method to examine the impact of human-computer interaction on innovation on personal sports devices. This study executes primary data analysis. The significant independent variable in the invention is human-computer interaction. Personal sports devices are also a dependent variable. Researchers used data collection techniques with interviews, documentation studies, literature studies and online data searches.

Information will be obtained directly through interviews. In-depth interviews can be conducted face-to-face with or without following interview guidelines. Meanwhile, a documentation study is a form of qualitative data collection method by viewing or analyzing documents made by research subjects or other people about the subject (Herdiansyah, 2014, p. 143). Researchers also use library research; library research can be done by reading books or literary works related to research problems. Through this process, researchers can explore research theories, methods and techniques to obtain additional data to support research. The data may come from the library or previous research reports (Sugiyono, 2014). The online data retrieval method is searching data through online media (such as the Internet or other network media that provide online facilities), allowing researchers to use online data and information in the theoretical form as quickly and efficiently as possible and academically. (Bungin, 2017: 128).

The data is separated by categories; Mind, Self, and Society. Mind category content is a question about how users can recognize symbols appearing in the sport application and how they understand the meaning of it. On the Self part, researchers try to collect how users use symbols in their interaction activities and how it helps them express themselves. Last in Society. Researchers gain all answers regarding how they communicate using the application to inform their condition, interest, and achievement. That data was an open question so researchers could better understand how the sport application built interpersonal communication and community participation. All not categories of answers were eliminated and put to a side.



## RESULTS AND DISCUSSION

### Symbolic Interaction

The term is self-explanatory. As we acquire symbols, we become empowered to interact with others using those symbols. The user of the sport device is getting a symbol as a treasury in his mind. The various features that often appear when used add alternative symbols that will later be used in a particular interaction. Many kinds of symbols that enter into the concept of consciousness occur accidentally. It occurs when the user receives the symbol as a stimulus in a particular interaction.

Sports in the past were a personal activity. People do the sport to fulfil their healthy needs instead of joining a particular circle. Sports achievements are never published except for athletes representing organizations or countries. Nevertheless, now it is changing; people put sport as one of their lifestyles. Doing sport can be a chance to join or become a member of society. The same interest people gather through many mediums, including digital. By interacting with a group with the same interest, people can improve their ability in interpersonal communication. Confidence, as the main element in those communication activities, is not showing up as a barrier anymore. The technology provides many symbols to choose from and to represent what they feel and think.

In human communication, Interpersonal Communication is one of the activities in using and understanding a symbol. In the digital era, the symbol does not only appear in humans, such as expression, gesture, or intonation. The created Symbols can use an icon that many people understand. The same understanding can create the application designer based on user habits. Symbols, as the interaction element, play the primary role in making the same understanding. Users can very quickly pick the symbol and use it in certain conditions.

### Mind

The mind would not exist without society, symbols, and the self (again, as the triangle graphic illustrates). In the mind phase, the user of the sport device filters symbols based on their comfortability in communication. All symbols became the alternative in interaction among the same user. In the human mind, people keep many symbols in different categories. In the Mind phase, the user results from a sports application that designs based on human feelings and needs. Applications provide many symbols the user can choose and keep as a new 'vocabulary' in communication.

Inside the mind of the sports device appears a new category shaped from the device. The device design's very user-friendly power makes it much easier for the user to adjust themselves to the symbol. With a simple icon, the user can understand the symbol's meaning. It was shown in the interview results that "easy" is one of the reasons for using a sports device. Those symbols stay in their mind until they acknowledge another symbol. In the digital era, a new symbol is straightforward to introduce. The application earlier published already shapes many symbols with specific meanings; for example, social media was born before sport application as a trend. It helps users familiarize themselves with



icons Like Love, Thumb Up, Thumb Down, chat box, and uploading images with captions. As the interviewee said, those symbols stay in the user's mind, and using icons in applications makes them communicate easier and express their feelings.

Data also shows the connection between applications and other devices that make the user repeatedly hit by symbols. All symbols automatically translate to a specific meaning, as mentioned by the interviewee in how they can understand how to use a symbol for communication with each other. Mentioned in a study that communicates an achievement in sport, some athletes communicate with each other and share valuable information, enjoy more and pull more fans (2022:27) JURNAL THE UNIVERSITY OF LAHORE.

### **Self (Symbolic Self, Social Self, and the "I" and "Me")**

Before symbolic interactionism, people believed that the self was a self-sufficient, independent being, and that all of its characteristics were innate. Mead believed that the self is an object of social relationships and, as such, is both a byproduct and an active participant in those interactions. Again, symbols as they are enacted in social encounters are the essential component that binds the individual to society. Because only humans have symbols by which we can think about who and what we are, only humans have a sense of "self". Part of our sense of self is formed by the attitudes, values, and ideas that we have developed through symbols.

One of the answers of interviewees mentioned that using sport application is only to get acknowledgement from the community. Meaning the symbol they keep in mind represents their message. They also believe that people who accept the message will have the same understanding and they can communicate with each other. During the Self-phase, the user will decide to use which symbol and how to understand it. The self becomes an essential phase because it will construct the social self through the sport application. 'I' happened during their consideration of which symbol is essential compared to others. The user is looking for a symbol as something essential to use based on circumstances. Using the specific symbol is at 'Me' conditions. Users can make free decisions by using many symbols to interact with others. Especially in interpersonal communication

At the self, the user sports device stage can differentiate its use in a particular interaction. As stated in the interview, the features available in the sports application used can represent the need for symbols in communicating. Nowadays, the user looks comfortable and can use the selected symbol. As a form of reciprocity, users can also understand messages conveyed by other users. The ease of using symbols is no longer in the design but in user preferences. It is increasingly visible at the Self-decision stage in determining which symbol to use and how to respond to a symbol occurring.

### **Society**

From the symbolic interaction perspective, the essence of a society is the interaction and communication of individuals through symbols. Users who are comfortable with specific sports applications may create a community that has a way of interacting using

symbols in common. The interviews show that similarities in using symbols encourage users to interact. For users, interactions do not form a particular community physically or exclusively because, according to users, the communication occurs more on the desire to show the existence in an environment with similar interests. The user can interpret the meaning of every symbol other users use to express their feelings. Interpersonal communication happened in informing every achievement; some also made a group target. Every person in that group will report how far they have achieved the target. The society appears through the same application user.

## CONCLUSION

Based on the results and discussion above, here are the following conclusions:  
 Mind; Users are familiar with understanding the features present in smartwatches and applications. They can describe and efficiently use existing sports features without reading the manual beforehand. Nevertheless, they only use features that follow the needs they usually use.

Self; The application and smartwatch users usually use apps that suit their needs and daily exercise habits. While many features are available on apps and smartwatches, they only use apps that suit their interests and daily activities. Some of the reasons are:

1. Record activities
2. Synchronized with the smartwatch
3. Acknowledge the distance, pace and time. As well as being able to see the progress of each exercise and its achievements, such as; heart rate, pace, time, calories burnt, etcetera.
4. Easy to use and easy to understand about the features provided.

Society; The users also interact with each other. Some of them are members of a community of users from similar applications. Even though they do not meet directly through the application used, they usually meet during sports activities. It is essential to discuss with each other and exchange information and knowledge to be helpful in the ongoing training. Mobile phone applications connected to smartwatches are not directly used as media to communicate with other users. Users usually use social media as a medium to interact. It can reach a wider audience, not just users of similar applications. The skill in using applications supports their activity.

Interpersonal communication is changing by the application in sport society. The symbol provided makes the user much easier to communicate among them. Interpersonal communication is not based on face to face activities any more, but facilitated by the application. In the future the concept of Interpersonal Communication is shifting. Symbols can replace many satisfactions in human interaction. This study showed using the symbol in a digital platform is very comfortable and creates satisfaction. The interaction became different in the conventional way, delay response is not a problem during communication. The user is more concerned about how to communicate with themselves. The reaction by

using the symbol in the community also creates a comfortable situation. Users no need to rush themselves to react to some symbol. Interpersonal Communication using digital platforms by using many symbols can shape a special community with a specific style of interaction. Community is not a physical group anymore but can be built based on the specific application.

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