

Feasibility and Acceptability of Using Smartphone App Headspace to Study Meditation Through Digital Media

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Abstract. Recently with the development of digital media and information technology, digital communication has been gradually becoming a main way how people communicate with others. This research will investigate the smartphone app Headspace on feasibility and acceptability to evaluate how people learning meditation through mobile apps. Meditation is a practice of training one's attention and focuses to increase calmness, physical relaxation, and psychological balance, even as an alternative treatment for illness. This research employs a mixed-research method that incorporates the methodology of user research, and it will use Interpretative Phenomenological Analysis (IPA) for data analysis. According to the feasibility and acceptability test of "5E", this smartphone app Headspace can efficiently provide users a meditation guidance and practice services. By the end of this research, results showed that digital media now is playing a significant role on influence people's thoughts and providing a new form and direction on how people do their everyday practice.

Keywords: Digital Media · Application Design · Meditation App · Smartphone · User Research

1 Introduction

People use numerous different ways to communicate with each other based on their respective relations and connections. Digital media build a bridge to connect people from different places and different environments. However, in addition to external forms of communication, communication also takes place between a human's mind and his/her own body, also known as internal communication. "Focus" is a word commonly used to refer to the state in which a human's body and mind are doing the same thing over a period of time with no distractions. Most people try to focus when carrying out a specific activity or claim that they cannot focus because of some external reasons. In fact, it is not necessary to forcefully place our attention on something, because patience and attention are always there; we simply need to notice the distractions. To fully understand this idea, we should train our awareness, which means being aware of what we are doing and our connection with others.



Fig. 1. Main UI.

Meditation also enables connections between different individuals. Once an individual can clearly observe and understand the self, real external communication starts. As we are all part of the same human species, there are not many differences between how an individual communicates with him/herself and how he/she communicates with others. Practicing meditation can strengthen this type of real communication. Meditation offers us an opportunity to observe the communication closely and become familiar with it. It differs from the traditional binary understanding of the spirit and the body. In meditation practices, the mind and the body are not divided, and people in this world are connected.

About Headspace, it is a meditation app to guide users on how to meditate and take care of users' mental health based on scientific methods and tools. This app has been used in more than 190 countries worldwide and has over 70 million members studying meditation. Andy Puddicombe is one of the most important mentors in this team. He is a former monk from Himalaya mountains and has guided people to learn meditation for more than 20 years. The main user interface is very brief (Fig. 1).

This research will focus on the process of awareness during meditation. Awareness (or being aware) is a component of meditation practices and has a specific meaning. It can be described as knowing something somewhere effortlessly and is different from thinking or feeling. If we take as an example an individual lying on his bed while his neighbor is playing pop music, this individual hears the music without thinking about the lyrics or feeling the beats. He simply knows that the sounds are there without needing to make any effort. This kind of action is called "awareness" in meditation. Moreover, awareness does not only happen with one individual and in the external world. Internal awareness involves the same process, as an individual can be aware of his/her body or be aware of his/her emotions without passing any judgment.

2 Research Questions

This key question addressed in this research is how the participants make sense of the "self" and their relationships with peers in the process of meditation practice. This question can be narrowed down into three sub-questions: 1) If we regard meditation practice as a dynamic process, how have the participants changed their perceptions of their minds and bodies? 2) How can the intersubjective relationships amongst the participants in the meditation community be understood? How do they perceive each other in the activities? 3) During the meditation process, are an individual's sense of self and his sense of others the same? If not, what kind of connectedness do they have? 4) Can Headspace users follow the run streak rules made by developing team?

3 Studying Meditation as Daily Practice Through Digital Media

It is important to understand the significance of phenomenology in studying the practices of mediation. The theory of phenomenology is different from empiricism. The presupposition of both empiricism and intellectualism is the separation of the physical and the mental [1]. Empiricism is mostly based on empirical studies. Using this kind of approach, researchers focus more on specific individual or 'personal existence' in the real world [2]. When following a phenomenological approach, Merleau-Ponty [2] states that the body is viewed as an 'existential unity', which he calls "body-schema". This concept implies that there is no divide between the physical and the mental. As a perceptual practice, studying meditation requires an approach that can collect data in relation to cognitive, intellectual, and intentional aspects. Phenomenology offers a method for analyzing phenomena, which means anything that is perceived, such as feelings, memories, imaginings, etc. [3]. Compared to empirical theory: If the intentional perception - one empiricist and the other cognitivist - both fail to account for what we see [3]. Contemporary phenomenological research is a kind of mixed-method approach that includes different perspectives. It is widely used in body and perceptual practices, as well as in the intentional and metaphysical fields [4].

Perceptions are another key aspect of this research. The basic understanding of perceptions in phenomenology is a process by which an individual receives information mixed with feeling, seeing, and thinking, also known as "sense data" [5]. The idea of perception deconstructs the aesthetics of logocentrism. Individuals have their own personal perceptions, which make them feel as if they are the center of the world [5]. Using the concept of perceptions lends objectivity to this study when referring to certain personal views and feelings. Phenomenological interpretations constitute an authentic form of evidence when analyzing individual perceptions, especially personal perspectives like the mind and body [1]. When considering perceptions, the eye and the mind represent the visible and the invisible [2]. An individual uses one's eye to receive visual information from the external world and uses one's mind to analyze this information internally or be aware of some invisible external information [6]. Different perceptions indicate different visions of the same information (Fig. 2). For instance, as Smith [6] notes: 'Painter felt that it was he who was seen by the trees rather than he was seeing the trees. For sensible beings, there is a concept called "indivision", which means that 'I am



Fig. 2. Different people doing meditation together.

and in which everything else senses itself' [6]. In perceptions, the eye acts like a sensor and the mind is merely the endpoint of this information delivery process. Based on this idea, it can be said that we are inhabited by an unknown sensibility. 'No one of us can close entirely around any single thing or expression ...Birth is not a point of origin but a well prepared of sensors ...We are embodied beings; our thoughts and senses are not our own activities' [7]. In order to be objective and accurate when analyzing emotional or intentional information and relevant contexts, a phenomenological approach is the most suitable method for this research.

4 Methodology

This research employs a mixed-research method that incorporates the methodology of phenomenology. The main research method is participatory observation. Participatory observation is a central method in phenomenology, and it will serve as the main means for collecting data in this research [8]. Focus groups and interviews will be used as support methods. The reason for selecting these methods is that they can be used to obtain first-hand data, which is more reliable [9]. The data collected is not only numbers. The focus groups will be used to gather data regarding whether the informants change their ways of communication after personal training in meditation. Board games will be used in the focus group to arouse group members' emotions. Semi-structured interviews will be the main form of interview method and will focus more on personal aspects, such as the connection between the mind and the body.

As a member of the Meditation Community of Chengdu (MCCD), I will participate in this survey and collect first-hand data by using participatory observation. A detailed survey plan is shown below.

Chengdu is the capital city of the Sichuan Province and one of the new first-tier cities in Mainland China. The field research will be located in five main areas of Chengdu:



Fig. 3. Informants.

Qingyang District, Jinjiang District, Chenghua District, Wuhou District, and Jinniu District. The location of specific buildings will be identified if necessary. The main group of informants are members of the Meditation Community of Chengdu (MCCD). The MCCD is a city-level community whose members are largely from the newly emerging middle class in the recent wave of China's urbanisation and gentrification. Any meditation trainer can join this community. This research will focus mainly on the community's new 2021 members, who include college professors, lawyers, yoga tutors, government employees, businessmen, artists, etc. Guanghong Liu is my gatekeeper for this study. She is a leader and organiser of the Meditation Community of Chengdu and deputy in the People's Congress and will grant me permission to access all of the relevant activities and collect data.

The planned size of the sample group is 10 individuals, who are distinguished by age, gender, nationality, and identity. Eight of the ten informants are aged between 20 and 45 years old (Fig. 3).

Seven informants are female, and eight are locals (from Chengdu). The other informants have lived in this city for at least one year. The most common profession in this research is academic – three informants. The field research will start on 1st June 2021 and end on 1st September 2021. The whole process will last three months. Time for analyzing data is not included in these three months. Three main activities are planned for the field research. The first involves holding focus groups before practice and focus groups after practice. The informants will be divided into two groups and each group given a leader. The second activity involves personal interviews on the last day of each month – lasting around 10 min each, with personal records kept [5]. The third activity is regular practice – 30 min (19:30–20:00) every Tuesday and Saturday. Participatory observation will be carried out during all of these activities. I will attend these activities and perform the same things that the informants do. During these activities, I will carry a camera and some relevant equipment, like a tripod and audio recorder, to collect data. An e-notebook will also be used as a support tool.

5 Data Analysis

As the main approach for analyzing data, this research adopts Interpretative Phenomenological Analysis (IPA), which has gained popularity in the social sciences [10]. My qualitative research question for IPA is: How do participants make sense of the "self" and their relationships with their peers in the process of meditation practices? In this section, I will try to explain the reasons for adopting this method of original raw data analysis. Phenomenology/descriptive phenomenology focuses on:

5.1 The Sense of Self and the Sense of Others

During the meditation practice, the core purpose is to get along with the self and others. However, this process is not divided into two different parts; the same series of training methods are used to develop the sense of self and the sense of others. When talking about sense, it can be treated as a kind of subjective expression. Subjective expression is not as clear and reliable as objective evidence. Academic research needs more accurate and objective information to support its point. The meaning-making process is necessary to transform this subjective expression into objective information (Fig. 4).

5.2 The Meaning-Making Process

Smith and Osborn [10] state that 'IPA is a suitable approach when one is trying to find out how individuals are perceiving the particular situations they are facing, how they are making sense of their personal and social world.' This research will collect raw data through participatory observation and focus groups. The raw data will be analyzed to make meaning of it. The meaning-making process is related to the idea that phenomenology emphasizes subjective personal interpretations and one's own perceptions of experience [9]. At this point, the subjective expression: personal interpretation and group's perceptions of experience has been successfully transformed to objective information (Fig. 5).

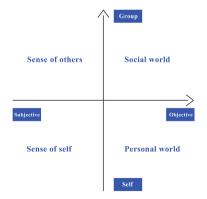


Fig. 4. Expression of raw data

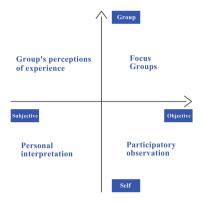


Fig. 5. Transformation from subjective to objective

Dimension	Tasks	Results	Feelings
Effective	Choose a meditation lesson	Completed 80% Need help 20% Failed 0%	Simple 80% Normal 20% Difficult 0%
Efficient	Fall asleep with "sleepcast"	Completed 90% Need help 10% Failed 0%	Simple 100% Normal 0% Difficult 0%
Engaging	Share a buddy link	Completed 90% Need help 10% Failed 0%	Simple 100% Normal 0% Difficult 0%
Error tolerant	Check in "my progress"	Completed 70% Need help 30% Failed 0%	Simple 70% Normal 30% Difficult 0%
Easy to learn	Complete a meditation lesson	Completed 90% Need help 10% Failed 0%	Simple 90% Normal 10% Difficult 0%

Table 1. "5E" test.

5.3 "5E" Feasibility and Acceptability Test

See Table 1.

6 Conclusions

In conclusion, this research has used a mixed-research method that incorporates the methodology of user research and phenomenology to find out how people doing their everyday practice and communicate with each other through digital media. Headspace is a special app for guiding people to practice meditation and building a bridge to connect these people. In this research, more than half of informants are using digital media to

improve their quality of life and connections with others. About 10 percent of them even think that digital life based on digital media is more important than their real life. For the future, digital media will play a more important role in people's lives and people's thoughts. Government and relative organizations should be responsible for supervising contents from digital media and take more serious care about how these media impacting daily life.

Acknowledgements. The author is grateful to the Headspace team for all the digital information. The author is grateful to the Visual Communication Design and Digital Media Art Department, Sichuan University of media and communications for their support. The author is grateful to professor Guanghong Liu who provides place and equipment for this research. The author is grateful to professor Jiemin Lyu for his guidance. The author is grateful to Meditation Community of Chengdu for their support. The author is grateful to all interviewees and students who participate in this research.

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