

Exploring Beginner Free diver's Experience of Benefit Recreational Freediving Activity

Explorando la experiencia beneficiosa de la actividad recreativa de apnea para principiantes

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Abstract. The purpose of this article is to explore the experience of an Indonesian beginner free diver perspective while practicing programmed recreational freediving. This freediving recreational theme tries to be built from the experience of a beginner free diver who obtains mental and physical health benefits from relaxation and other physical aspects through diving. This is to support the program for further development of freediving recreation as a choice of physical activity in free time. A qualitative methodology has been used twenty-six freedivers aged between 18 and 43 years were recruited to participate in the study. In-depth interviews were specifically designed to collect data about the forms of experience, learning, motivation, positive mental involvement through recreational freediving activities carried out. Data were collected with anecdotal notes through interviews and submitted to inductive content analysis in the ATLAS.ti 9 program. Physical theoretical literacy analysis was used to address the empirical data analysis. The results showed patterns in the data, including information gathering physical exercises, mental training, engagement as a learning journey, and experience and withdrawal from recreational freediving performed. It is concluded that this type of recreational freediving exercise provides a form of physical activity that provides mental and physical benefits for novice freediving.

Keywords: Perspective, Benefit, Recreational Freediving

Resumen. El propósito de este artículo es explorar la experiencia de un apneista principiante indonesio mientras practica buceo en apnea recreativo programado. Esta temática recreativa de apnea intenta construirse a partir de la experiencia de un apneista principiante que obtiene beneficios para la salud física y mental a partir de la relajación y otros aspectos físicos a través del buceo.

Esta temática recreativa de apnea intenta construirse a partir de la experiencia de un apneista principiante que obtiene beneficios para la salud física y mental a partir de la relajación y otros aspectos físicos a través del buceo. Esto es para apoyar el programa para un mayor desarrollo de la recreación de apnea como una opción de actividad física en el tiempo libre. Se utilizó metodología cualitativa y se reclutó a veintiséis apneistas con edades comprendidas entre 18 y 43 años para participar en este estudio. Las entrevistas en profundidad se diseñaron específicamente para recopilar datos sobre las formas de experiencia, aprendizaje, motivación y participación mental positiva a través de las actividades recreativas de apnea realizadas. Los datos fueron recolectados con notas anecdóticas a través de entrevistas y sometidos a análisis de contenido inductivo en el programa ATLAS.ti 9. Se utilizó el análisis de alfabetización teórica física para abordar el análisis de datos empíricos. Los resultados mostraron patrones en los datos, incluida la recopilación de información sobre ejercicios físicos, entrenamiento mental, participación como viaje de aprendizaje y experiencia y retiro del buceo en apnea recreativo realizado. Se concluye que este tipo de ejercicio recreativo de apnea proporciona una forma de actividad física que proporciona beneficios físicos y mentales para el buceo en apnea novato.

Palabra clave: Perspectiva, beneficio, apnea recreativa

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Introduction

Sports, often perceived as individual attributes within a competitive setting, can be categorized into two distinct groups: competitive (Ives et al., 2020). While more rigorous physical performance, full engagement and high effort in conditions of perceived competition versus no competition, and resulting in better performance (Ives et al., 2020). On the other hand, the definition of health includes physical, social, and mental domains thereby placing sport as a means of psychological and health benefits (Eime et al., 2013). To gain health through sports activities. Sport is a popular form of leisure-time physical activity, there are many different ways a person can be physically active there are four modes of leisure-time physical activity: team sport, individual sport, organized but non-competitive physical activity; and non-organized physical activity (Eime et al., 2013). These sports serve as a means of destressing, allowing participants to unwind and

have fun without the need for intense rivalry (Zhao, 2022).

More than a decade recreational diving has become a popular sport (Bain et al., 2018), even though the human ability to remain underwater is physiologically limited. Understanding these limitations increases the safety and enjoyment of diving. Breath-holding dives involve head-out water immersion, apnea and immersion, exercise, cold stress, and pressure exposure. Each of these components in itself gives rise to prominent and specific physiological effects (Lin, 1988). The combination of these factors produces a unique and interesting physiological response commonly known as the diving reflex (Lin, 1988). Freediving is basically a swimming sport that is done by diving to the bottom of the water without using an oxygen tank, sport where individuals dive freely by holding their breath in water (Alkan, 2013). Not like ordinary swimming, freediving requires good breathing techniques and high focus. Breath holding time and the underwater environment are the two main challenges, which accompany freediving

(Ostrowski et al., 2012). Freediving, apnea diving or breath-hold diving, is a form of rescue without a respirator, the oldest known and considered one of the most extreme sports world wide contemporary issues. Vessel immersion and adjustment pushes veins to the heart and chest veins. Autonomic responses include diving bradycardia, peripheral vasoconstriction, and splenic contractions, which aid in efficient oxygen consumption (Fitz-Clarke, 2018; Fitz-Clarke, 2006). Freediving has gained popularity as a recreational pursuit, offering an alternative to scuba diving. Enthusiasts develop self-discipline, refine breath-holding techniques, and aim to extend dive durations. Various disciplines exist within freediving (Allen & Allen, 2022), being interesting, to package the sport of freediving with a recreational concept aimed at maximizing the aspects of the benefits of holding-breath which is the main basis of this sport. An apneist or free diver will find and experience unique sensations, serenity, and pleasure through apnea thereby increasing control and quality of life (Tovaglieri, 2004).

This research focuses on adults who are active in recreational freediving activities in the construction of the theme exploring the benefits of physical and spiritual fitness experienced from personal experiences in non-competitive freediving. What part of the exercise made a special impression and why. Then after that is achieved, how can a freediving recreational develop into a driving force for a holistic approach for someone to get physically and mentally fit, and motivated through non-competitive freediving? It can be designed to serve as a prescriptive guide for developing a freediving programs that focused on maximizing benefits. This study also sparked discussions about increasing the ability of the community to enjoy freediving safely and differently.

It is widely recognized that different individuals can perceive the same event in different ways, which is not a controversial statement. The interpretation of an event can vary greatly among people. This divergence can be attributed to the unique "glasses" through which individuals view the event. These metaphorical glasses represent their perspectives, influenced by their individual experiences, beliefs, and backgrounds. Each person's point of view is shaped by their conceptual or theoretical framework, which serves as the foundation of any research project. This framework plays a vital role in how a researcher formulates and investigates a research problem, as well as the significance they attach to the data obtained from their investigation. Essentially, the conceptual or theoretical framework is the essence or soul of a research project, as it guides the researcher's approach and understanding of the problem at hand (Imenda, 2014).

Confronted with a more existentialist perspective, it is worth asking, can a training program in freediving be used as a holistic approach in maximizing the health and spiritual aspects of the benefits? at the limit of practice, what aspects of the benefits are felt? so that it can be extended to certain types

of exercises or didactic process destabilization situations that require improvised solutions for effectiveness

Methods

This study responds to qualitative research methodology (Bhangu et al., 2023), and centers on exploring the meaning of recreational freediving. It adopts a phenomenological perspective (Coy, 2019), emphasizing the emerging insights regarding the benefits of recreational freediving based on the experiences and subjectivity of the participants. The study is designed within a case study framework (Mujica Johnson et al., 2023), leveraging the phenomenological perspective to enhance understanding in case studies. Case studies are highlighted for their ability to support the interpretation of authentic social phenomena. Respondents, a total of twenty-six people were recruited to participate in this study. I set the recruitment criteria to include those who are actively practicing freediving and are still involved in the physical activity of freediving. Maximum variation also seeks to include both female (N = 14) and male (N = 12) respondents. I accessed respondents through personal connections and accidental encounters. Informed consent was sought before the interview. I also maintain ethical practices by seeking approval informally. Data Collection Data was collected through in-depth interviews with two interview strategies. First, I physically met free diver practitioners. I was able to gather ten respondents in a group interview where they shared their experiences with freediving. The second strategy involves individual interviews with other respondents through semi-structured interviews via an online platform, gathering the same information as the first strategy. All interviews were recorded using an online platform, and transcribed verbatim for further analysis. Data Analysis of the collected data is carried out through an interpretive paradigm that focuses on discerning the latent meaning of the information provided. More specifically, a thematic analysis is performed to identify patterns in the data (Braun & Clarke, 2006; Braun, Clarke, Hayfield, & Terry, 2019). The steps in the analysis include data recognition, inductive coding, theme development, and theme refinement and definition. This process begins inductively and then moves deductively toward the end of the analytical step. I also use ATLAS.ti 9 program, a computer-assisted qualitative data analysis to assist the process recommended in the thematic analysis (Caly Setiawan, 2022).

Research Context

The specific role of recreational sports is to increase people's participation in sports in order to improve physical fitness and mental health. this is an important key in achieving a development paradigm through sports, one of which is the focus on the development of recreational sports (Ramadhan et al., 2022).

Participants

Respondents, A total of twenty-six people were recruited to participate in this study. I set the recruitment criteria to include those who are actively practicing freediving and are still involved in the physical activity of freediving. Maximum variation also seeks to include both female (N = 14) and male (N = 12) respondents. Respondents live in Central Java, Indonesia with an age range of 18 years to 43 years. One respondents as a free diver instructors and other respondent work backgrounds are students, government workers, art workers, private workers, housewives with meet criteria of those who have just completed a beginner freediving certification.

Data Collection

Data was collected through in-depth interviews with two interview strategies. First, meet the free diver practitioners physically. Guidelines which contain the concept of semi structured questions containing themes, the main content of the question about the respondent's knowledge of freediving, the type of exercise, as well as the respondent's acknowledgment of the benefits felt before and after practicing freediving in addition to what type of exercise made the most impression on them as a guideline flow of conversation in the interview. And the second strategy of individual interviews with other respondents through semi-structured interviews through online platforms collects the same guidelines as the first strategy. All interviews were recorded through an online platform and transcribed verbatim with an average of two transcripts for further analysis.

Data analysis

The analysis of the collected data is carried out through an interpretative paradigm focused on looking at the latent meaning of the information provided. More specifically, a thematic analysis is performed to identify patterns in the data (Braun & Clarke, 2006; Braun, Clarke, Hayfield, & Terry, 2019). Entry analysis includes familiarization with data, inductive coding, theme development, and theme refinement and definition. This is done by grouping the inductive codes according to the type of information such as personal background concerning the respondent's background, then grouping the inductive codes for the types of non-competitive freediving exercises carried out, then grouping the inductive codes for the types of acknowledgments about the benefits obtained from freediving exercises. This process begins inductively and then moves deductively toward the end of the analytic steps. I also use ATLAS.ti 9, computer-assisted qualitative data analysis to help with the recommended process in thematic analysis (Caly Setiawan, 2022).

Analysis Results

Facilitating the results of an exploratory interpretive paradigm that focuses on discerning the latent meaning of the

main themes in the data. This is a description of the personal experiences of the respondents as long as they are active in freediving, including learning trips, aspects of the training that specifically impress them compared to before practicing freediving.

Table 1.
Frequency analysis resulting from participant interviews

Criteria	Total participants 26 people		
	Information	N	Percent
Gender			
	Male	12	46%
	Female	14	54%
Age range			
	18-30	22	85%
	31-40	2	8%
	> 40	2	8%
	College	11	42%
	Government Employment	1	4%
	Employment	9	35%
	Art Worker	1	4%
	House wife	1	4%
	Undefine	3	12%
Motivation FR			
	offered by a friend	8	31%
	try something new	13	50%
	gain health benefits	5	19%
Opinions about the FR training program *			
	recreational freediving is fun	12	46%
	the training is done gradually and is not forced	19	73%
	before practicing FR, always do a warm-up and breathing exercises	13	50%
Learning Journey *			
	gain knowledge perspective	14	54%
	managing mental health	13	50%
	personal hope/target	9	35%
Most Impactful FR Exercise Assessment *			
	Dry static & Static Apnea	9	35%
	Dynamic Apnea	9	35%
	Yoga & Meditation	8	31%
	Breathing Exercise	8	31%
	Free Immersion & CWT	13	50%
	Deep Talk	2	8%
Benefit Freediving Recrea			
	feel happier	12	46%
	improving diving skill	7	27%
	self confidence	13	50%
	self awareness	11	42%
	regulated breathing & relaxed	17	65%
	Self Control	11	42%
	Psychosocial Benefit	8	31%

* Respondents can provide multiple answers based on what they experienced

The characteristic of freediving, unlike most sports, is the absence of regular breathing. Therefore, although freediving is quite popular, if done without proper supervision, education and training, it can be dangerous (Schagatay, 2011). The themes constructed from the study of the benefits of recreational freediving by taking into account the meaning reflected in the inductive codes that emerge from the analysis are: Types of recreational freediving exercise by category (breathing exercise, meditation, breath holding duration, relaxation, gradual training), Learning Journey (reasoning to learn freediving, achievement, motivation), Benefits obtained by respondents (confidence, self-control, relaxation, regulated

breathing), personal background (socio-economic background, domicile, gender, age). This was done as a step to capture what was built from research about the benefits of recreational freediving in a more comprehensive manner, especially capturing the informant's understanding of the type of training, reasons for practicing, the benefits he obtained as well as exploring secondary information regarding the informant's personal data profile as to whether or not he was a free diver.

Freediving Recreational as a healthy physical activity

Development through sport is a global issue has become a paradigm in the field of sports in which its discussion is widely applied and means that sport has a role as important aspect of development. (Dowling et al., 2018). The implementation of fostering educational sports, performance sports, recreational sports, all sports activities in Indonesia must follow all the rules contained in Law no. 3, Th. 2005, SKN. (Zulyaden et al., 2022). At its core, the sport of recreational freediving is dedicated to leisure and enjoyment, resting on the creation of a relaxed environment, rather than a strong focus on competitiveness. The data shows the current pattern of their participation as respondents in terms of freediving, the majority of respondents are involved in recreational and non-competitive types of freediving. For example, NS is interested in pursues freediving "*I deliberately took part in recreational freediving because I wanted to get physical/mental health benefits through freediving training*" (NS The respondents interested in practicing freediving to get physical/mental health benefit). Several other respondents found media to control their thoughts through freediving exercises "*I am the type of person who has an extraordinary feeling of panic, then I was coaxed through freediving exercises, calming my mind, controlling my breath while sitting down until I calm down before entering the water, it turns out that I can control the panic that I used to experience*" (RN). Likewise, KLT said: "*I feel fun, freediving is like holding my breath in yoga plus when I do Dynamic apnea during open water exercises in the sea I feel relaxed, seeing lots of fish in coral reefs, I feel happy*". Both respondents revealed that they were interested in freediving to calm their minds, self-control and through a type of breathing exercise in freediving which is similar to yoga plus the presence of dynamic apnea swimming which makes the body relax and feel happy. In line with other research López Mesa et al., (2023) that yoga exercises on effectiveness of yoga exercises as physical therapy in moderately improving quality of life in terms of vitality and mental health. Research studies have shown a noteworthy impact an activities related to yoga, such as pranayama breath-hold training, hata-vinyasa yoga practice there was a significant improvement in breath-holding capacity (Barrientos et al., 2021; Singh et al., 2022; Patel, 2021; Saoji et al., 2018; Rai, 2014; Durai & Athisayaraj, 2019; Vigneshwaran, 2015)

Freediving Sport Engagement As A Learning Journey

Learning the recreational sport of freediving and interpreted as a main task in the activity of adding knowledge and skills within the framework of a learning journey. One of the arguments that arose included placing freediving in the course of learning. DSN, a student respondent, said: "*I am interested in learning freediving because it is fun and as a supporting knowledge/skill in my major (oceanography)*". Likewise, PG, a private worker, said: "*I practice freediving because I want to try new things, get out of the routine, look for something different from before, and the benefits are felt. The mind becomes calmer, the heart rate tends to go down, especially in my running practice. course I also hobby jogging activity too*" Respondents did recreational freediving not only because it was fun but also to increase their knowledge/skills, that freediving takes them out of their daily routine and is a learning journey looking for something different from before. Other statement from BN is interested in and pursues freediving after a long time in scuba diving. "*I got to know the world of diving in general since studying marine at UNIP around the beginning of 2000. I got to know this type of diving for the first time using SCUBA equipment, after that, I worked hard by joining a diving club on campus, namely UKSA, until I competently reached instructor level at SSI and ADS. I am interested in learning the sport of freediving, including being about 4 years old, preferring more to recreational and health sports than competitive ones. The factor is that I am 43 years old, and I feel that it is too late to catch up with achievements or catch records.*" (BN The respondent revealed that he had known SCUBA diving for a long time and was still relatively new to learning freediving, and had focused on studying until now to become an instructor and prefers recreational and health sports to competitive ones due to the fact that he is old enough to chase records. In line with other research Ronkainen et al., (2021), sport can be positioned as an important context for learning that contributes to a person's broader development beyond sport-specific skills with an existential approach providing a theory of non-instrumental learning with an emphasis on discontinuity, the relational self, and 'being', opening the way to explore various forms of informal learning. Apart from that, through physical activity you will be able to feel passion for sports, especially harmonious ones, experience frequent or deep flow episodes, and have a fairly high perception of sports competence (Bogado & Villalba, 2023).

Freediving as a physical activity that provides benefits

One such experience comes from the phenomenology of recreational freediving as a physical activity that provides positive benefits. The results of the analysis show a pattern in the data about how the 9 participants experienced changes in the form of positive benefits for both mental health and physical health, which motivated them to keep practicing regularly. One of the arguments presented by a student respondent

named UM said: "I have known the sport of freediving for about 2 years, routinely, the frequency is more than 2 times a month, each practice is about 2 hours with the stages of warming up, breathing relaxation, static (O2/CO2), dynamic.". Likewise, STR said: "I have known the sport of freediving for around 19 months, currently regularly practicing with a frequency of more than 2 times a month and the duration of each exercise is between 3 to 5 hours". Again specifically, the informants articulated their activities with the motivation embedded in their embodiment, "My motivation is to be able to free dive by pushing my own limits but still being comfortable, doing sports freediving with a qualified buddy, adequate relaxation breathing" (ATHY). And then freediving, specifically for informants, is articulated in improving physical skills, according to FBR, an art worker: "I practice freediving because basically I like swimming and things smelling of the sea, freediving, in my opinion, is a Breathing exercise and followed by practicing several freediving disciplines, Relaxation breath then do dry static according to the specified time and do it in stages ". And also experience according to DK: "freediving is practically being able to dive freely without extra tools, but it must be done with a warm-up stage to avoid possible injury, Relax training, focus, breathe, swim then Dynamic apnea. When I dive deeper feel calmer and more focused". Respondent describes base interviewees' information, on average getting mental benefits, relaxed, confident, focused, and regu-

lated breathing from freediving exercises " dry static and dynamic apnea exercises ", with an average breath holding duration of 50 seconds to a maximum of 3 minutes.

While many land-based sports are stressful on your joints, activities that take place in the water can relieve joint pressure, reduce swelling, and even increase their range of motion. This is due to hydrostatic pressure being exerted over your whole body from the weight of being underwater, which counteracts the usual pressure your body faces during high-impact activities. Freediving training courses really focus on confidence. Confidence before, during, and after your dives are important for safety, relaxation, and for a good dive in general, learning how to make the body feel relaxed (Cheryl Crumpler, 2023; Kristina Zvaritch, 2020; Whitlock, 2022). In the other research show result that anxiety, stress level, and negative affectivity scores were significantly lower among the athletes (free divers) as compared to the non-athletes (Neş Alkan & Tolga Akış, 2013).

One such experience comes from the phenomenology of recreational freediving as a physical activity aimed at recreation, relaxation and focusing on breathing exercises is done in stages. an example of a recreational freediving exercise as shown in .

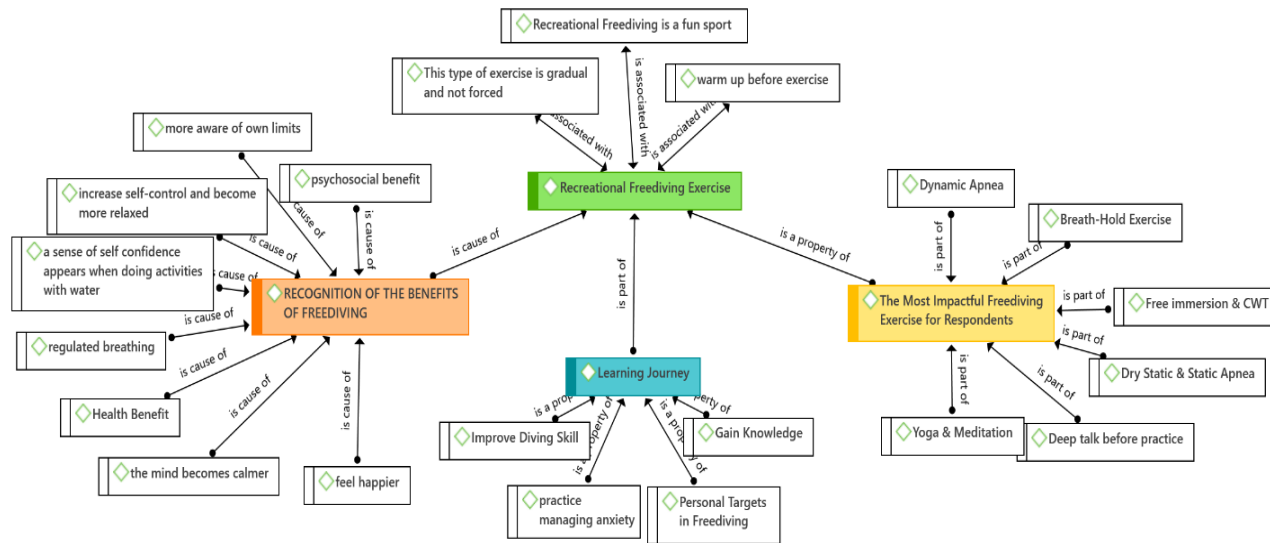


Figure 1. The themes constructed from the study

Discussion

The results of the current study describe the respondents' experiences in freediving sports activities which have been analyzed both inductively, based on empirical data, and within a

theoretical framework of phenomena. Empirical data is processed in an inductive framework, representing the real experience of the respondents after practicing freediving regularly. On the other hand, Whitehead's conceptualization is firmly rooted in philosophy, especially under the traditions of phenomenology, existentialism, and monism (Whitehead,

2001). Because of this, this discussion section is dedicated to elaborating on linking empirical data and theoretical analysis, relying heavily on interpretive measures. It can be interpreted that the respondent shows an attitude that comes from philosophical attributes. They have some kind of capacity to articulate their realized potential to improve their quality of life (Whitehead, 2001). Most of them reflected on their journey through life and that their quality of life had been improved in one way or another such as reports of increased self-confidence, self-awareness, additional diving skills, feeling happier and more relaxed. By being in the world, which is a derivation of phenomenological thinking, they interact with the environment through dimensional embodiments (Durden-Myers et al., 2018). Anyone who can swim can practice freediving, although often short distances, still short depths, lasting a maximum of a few seconds and a few dozen meters. Freediving is an extreme form of breath-hold diving (Ostrowski et al., 2012). The freediving training program which is non-competitive and relaxing from the interview results is described as having a series of positive benefits for the respondents, so that they instinctively encourage them to be willing to be consistent in continuing to practice. This study describes the interviewees' information, on average getting mental benefits, relaxed, confident, focused, and regulated breathing from freediving exercises "dry static and dynamic apnea exercises", with an average breath holding duration of 50 seconds to a maximum of 3 minutes, and, interestingly, this needs to be tested empirically experimentally

In freediving freediving as a physical activity aimed at recreation, relaxation and focus on breathing exercises and breath holding combine with diving activity. This relevant with (Allen & Allen, 2022), the mammalian diving reflex (MDR) refers to a set of temporary physiological adaptations that happen in mammals when they dive into cold water. These adaptations have been noted across all mammal species, aiding in oxygen conservation and extending the duration they can stay underwater. The key components of this adaptation are bradycardia (slowing of the heart rate), apnoea (temporary cessation of breathing), and heightened peripheral vascular resistance. Factors such as splanchnic contraction, bradycardia, peripheral vasoconstriction, central vasodilation, and a shift of blood to the lungs all contribute to establishing this physiological response. Holding breath, as well as generally improving breathing and lung function, has useful, potentially lifesaving benefits, including increasing life span by preserving the health of stem cells (Mohrin et al., 2015). Freediving training programs place a strong emphasis on building confidence. Confidence is crucial not only before and during dives but also afterward, as it plays a key role in ensuring safety, promoting relaxation, and enhancing the overall quality of the dive experience (Kristina Zvaritch, 2020; Whitlock, 2022). Other research has demonstrated that anxiety levels, stress levels, and negative affectivity scores were notably lower

among athletes, particularly free divers, compared to non-athletes (Neşe Alkan & Tolga Akış, 2013).

Conclusion

By derivation from phenomenological thinking, they interact with the environment through dimensional embodiments (Durden-Myers et al., 2018). This is based on the respondents' experiences in freediving sports activities which have been analyzed both inductively, representing the real experiences of the respondents after practicing regular sports. Respondents who underwent a recreational and relaxing freediving training program based on the interview results were described as having a series of positive benefits. people who can swim may practice freediving, although often short distances, still short depths, lasting a maximum of a few seconds and a few dozen meters. Freediving is an extreme form of breath-hold diving (Ostrowski et al., 2012). In the next step after that is achieved, how to encourage someone to develop into a competent, confident, and motivated mover through freediving? This can be designed to be a prescriptive guide for developing freediving recreational programs aimed at maximizing aspects of the benefits for both physical and mental health.

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