

## **Sociological Study of Fishing Themes Commonly Sought by Recreational Anglers**

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### **Abstract**

*A total of 100 anglers were successfully surveyed in this study and all of them claimed to be recreational anglers. There are 17 fishing themes that were exploited in this study. The results exhibited that the anglers in this study agreed with 14 fishing themes that were proposed to them, for which they registered a mean agree level of 4.09 to 5.33 on a scale of 1 (completely disagree) to 7 (completely agree). However, the anglers disagreed with 3 fishing themes where their mean agree level ranged from 3.37 to 3.95. Most anglers in this study did not agree in spending time with family while fishing, selling all fish that had been caught as source of income and releasing back all fish that had been caught as satisfaction in fishing. For future study, the other researchers should use the same variables in different recreation things as to make the results more accurate and precise.*

**Keywords:** Fishing themes, recreational anglers, agree level

### **Introduction**

Nowadays, many people are tried their best in seeking recreation that contribute to life satisfaction, quality of life, health and wellness. This people who are came from all walks of life, have realized that by doing recreational activities, they manage to gain a healthy body and mind, which as consequences, increase their productivity in their routine activities. Burch, (1969), describe recreation as any activity a person does in order to get relaxation and enjoyment. This type of activity is generally derived from an individual or groups of individual that are good in utilizing their free time for physical and spiritual satisfaction.

One of recreation that can easily attract people is recreation fishing and it can be defined as catching fish for fun, (Pitcher and Hollingworth, 2002). In the eye of recreational anglers, fishing gave a lot of benefits in enhancing their quality of life. As we move from country to country in this world, we can see the similarities and the differences characteristics of this kind of activity. Fishing themes, literally consider as fishing motivation, can be described as the incentives that inspire a person to go fishing, and that bring about specific angler behaviour, (Naito, 1992). Fishing themes can bring satisfaction, and is dependent upon sport fishing experience. Satisfaction, as described by Ditton, (1992), is determined by the difference between the outcomes one desires or thinks should be received (themes) and perceived fulfillment of those outcome. Hence, satisfaction from fishing enables recreational anglers to improve their mental and physical health.

Although themes of fishing has been well known and understood among recreational anglers, nevertheless, the exact fishing themes sought by recreational anglers is still not well documented. Moreover, fishing themes is essential in giving good perspectives among individuals who are wanted to try new type of recreation. Sociological studies in fishing themes are important in helping to maximize the development of recreational fisheries at the entire world. According to Pollock et al., (1994), evaluation of attitudes, preferences and satisfaction among recreation anglers can be understood as sociological study of fishing themes. The result from this study will provide adequate information about fishing themes sought by recreational anglers and suggestions on how to take opportunities in improving fishing setting over these fishing themes. Thus, the general objective of this study is to determine preferences' level of fishing themes that are commonly sought by them.

## **Literature Review**

### **Definition of Important Concepts in Recreational Fisheries**

Fishing is actually an activity that had been done by human being for a long time ago. Robert, (2002), reports that the first evidence of human association with fish in such a manner that fishing is at least implied (fish spears) appears in the fossil record of approximately 90 000 years ago. Records of more recent periods have unearthed more diverse tools, such as fish hooks, net sinkers, and ropes, (Diamond, 1991). Hence, records of ancient fishing can also be discovered in images form such as painted mural and drawing.

According to Mustafa Kamal, (2010), recreation can be defined as any activities that a person does during his spare time outside of the working hours to obtain physical and mental rejuvenation. Many people nowadays try their best in seeking recreation activities that can refresh and clear up their mind as it enable them to escape from hectic lifestyle. In ancient time, recreation activities were highly exclusive where only noble people such as royal family and landlord were eligible to do recreation activities. However, in this present time, it seems that people from walks of life are capable of enjoying recreational activities.

One of recreation activity that easily attracts a lot of people due to its advantages is recreational fishing. Neulinger, (1974), states that recreational fishing is any form of fishing done during free time and it is subjectively defined by the individual as being leisure. Recreational fishing can also be defined as fishing primarily with hook and line for pleasure, amusement, relaxation or home consumption, (Aas, 2002). If part or all of the catch is sold, the monetary returns constitute an insignificant part of the person's income.

Those who are involved in recreational fishing are quite known as recreational anglers and there is a diversity of anglers within the statewide population, (Ditton, and Hunt, 1996). Rudd et al., (2002), describes recreational anglers as Fisherman who fishes during leisure time and does not sell the catch. Recreational anglers can be anyone in society as long as they follow etiquettes in recreational fishing

Sumaila, (2001), reports that recreational fisheries are defined as all human activities that are centered on recreational fishing and inclusive of recreational fishing itself. This type of fisheries includes the fishery resources, fishermen and businesses providing needed goods and services. Hence, recreational fisheries can also be understood as all fishing activities that are not conducted for commercial fishing purposes, (Griffiths and Lamberth, 2002).

### **Concepts of Fishing Themes**

Themes from recreational fishing comprise consumptive and nonconsumptive categories, (Barbara, 2002). For consumptive theme, it can be divided into two parts that are retention and nonretention factors. Retention factors are generally factors that we can see, taste and see. On other words, we can felt the factors by our sense organ and not just sense them in our mind only. Barbara and Bryan, (2000), state that there are several examples for retention factors such as catch to eat and catch for trophy. These factors are known to give recreational anglers a vast amount of motivation when they go fishing.

On the other hand, nonretention factors may also entice recreational anglers to go on a fishing trip. Radomski et al, (2001), report that Recreational anglers can only feel this type of factors in their mind only. So, we can assume that nonretention factors are in abstract form and definitely cannot be felt by our sense organ. There are a lot of examples for this factors such as the desire to fish for sport, to improve fishing skills, to test fishing gear, and to experience a challenge and thrill, (Weber, 1992). Many recreational anglers try their best to achieve several examples of nonretention factors as it can significantly improve their skills in fishing.

Nonconsumptive theme, as describe by Walton, (1997), such as personal and environmental factors, may also play a role in tempting recreational anglers to go on a fishing trip. Examples for personal factors may include the desire for family closeness, for fun and adventure, for personal achievement, for peace and solitude, and to enjoy the company of friends, (Haab, 2000). Moreover, the anglers may also want to relax or to escape from the daily routine.

Environment factors are factors that closely related to environmental conditions at fishing site, (Clark, 1983). Ditton and Fedler, (1994), state that there are several examples environmental factors such as the wilderness setting, the anticipated weather, and the water quality and accessibility.

The chance to spend time outdoors and enjoy nature may also induce recreational anglers to go fishing. In order to maintain high quality fishing experience among recreational anglers, the environment factors must be perfectly conserved and protected.

### **Aspects in Sociological Study**

Sociological studies in recreation fisheries are important in helping to maximize the development of recreational fisheries at the entire world. According to Pollock et al., (1994), evaluation of attitudes, preferences and satisfaction among recreation anglers can be understood as sociological study of recreational fishing. One of popular methods in sociological study in recreation fisheries is by means of anglers' survey. Thus, designing surveys is a challenging undertaking where the questions in the survey must be clear, easily understood by respondents and have an unambiguous interpretation, (Duffield et al., 1990).

To be certain, attitudes and preferences are the main examples of element in sociological study. As stated by Allen, (1988), approaches to measuring angler preferences and attitudes are important methodological issue for recreational fisheries study. Attitudes among recreational anglers can be described as the feelings or opinion of recreational anglers at any issues or objects that associate with recreational fisheries, (Culp, 1998). Pollock, (1996), proposed that preferences, on the other hand, provides valuable input to the researchers of recreational fisheries on whether current management is aligned with anglers' desires and also critical in estimating benefits of management changes.

The findings or the results in sociological study of recreational fisheries are very diverse in categories and sections. The findings may include demographic background of recreational anglers, fishing experience background of recreational anglers and any other suitable topics that related to the development of recreational fisheries. For example, a study conducted by the German Anglers' Association (DAV), showed that the most important motivation to go fishing in Germany is enjoyment of nature (77%), followed by relaxation (69%), catching fish for consumption (65%), family outing (60%), meeting friends (50%), and enjoyment of the catch (50%), (Steffens and Winkel, 1999).

Another example of the finding is from a survey administered by the United States Fish and Wildlife Service (USFWS). The survey, as reported by Hicks et al., (1999), viewed that if Florida were closed to recreational fishing, there would be a welfare loss of \$4.3 billion but on the low side, closing Georgia, a state with very little coastline, would produce a welfare loss of only \$1.5 million. As for Malaysia, one of recent surveys showed that very few women involve actively in recreational fishing due to their perspectives in gender roles and self-concept, (Zaidi, 1991).

There is no doubt that sociological evaluation give significant impacts on the development of recreation fisheries. The study generally are able to provide sufficient data to the government and certain non-government organizations that involve in recreational fisheries in improving and improvising economic analysis where this analysis can be a useful tool for evaluating recreational fisheries policies, (Murray et al., 2002).

### **Values of Recreational Fisheries**

Values are somewhat important to attract numerous numbers of anglers to participate and enjoy recreational fishing. Actually, there is no accurate definition for values in recreational fishing as among recreational anglers, they still argue about the agreed definition of value, (Kearney, 1999). Hence, the lack of agreed definition of value makes it difficult for anglers collectively to assert rights to the resource and justify allocation and management priority. According to Hancock, (1995), individuals frequently attach great value to recreational fishing but the reasons that underpin this evaluation are often idiosyncratic and even vary with time for each individual.

Hundloe, (1997), reported that there are three major categories of value of recreational fisheries. The categories are ecological, economic and social, but these categories are recently recognized, poorly measured or rarely valued at all. Not surprisingly then, current management practice is seldom deliberately aligned with a comprehensive assessment of real values, (Harris and Ward, 1999). Thus, each category of values has their own positive and negative attributes. It is imperative for positive attributes to counter the problems that will occur from negative attributes.

As for ecological value, it is clear that this type of value come from general community impact even though this impact usually comes from the collective influence of many individuals, (Graefe and Fedler, 1986).

Connor, (2000), stated that positive attributes come from this value are education, promotes environmental responsibility and aids environmental monitoring while the negative attributes are fish mortality, pollution and spread diseases.

According to Gilmore et al., (1990), even though the economic values appear relatively straightforward, economists have struggled to describe an effective formula for evaluating recreational fisheries. The positive elements that can be traced from this value are quality food, employment, tourism, decentralisation and promotes exports for some countries while the negative elements are access costs, insufficient method of harvesting food, reduces commercial fisheries and management compliance costs, (Hunt, 2001).

Social value generally has complex benefits and disadvantages for individuals and for the broader community where numerous issues can have both positive and negative attributes, (Spencer, 1999). As described by Connor and Hunt, (2000), the examples of positive attributes of this value are privacy, relaxation, exercise, sport, competition, bonding (parent / child), quality nutrition and education while the negative attributes are dangerous, requires enforcement, antisocial, social class divisions and violates animal rights.

### **Pay Fishing Site**

Recreational anglers nowadays are lucky to have a very wide selection of places for fishing. They can choose whether to go fishing deep into jungle or just go to nearest pay fishing sites that are abundant at urban or rural area. Pay fishing site, as described by Elliot, (2004), is a private area for fishing where the area usually contains inland ponds or concrete tanks. Most inland ponds contain numerous number of freshwater and brackish fish species while concrete tanks are designed to rear several species of prawn. The recreational anglers must pay certain amount of fee in order to get privilege of fishing at this place but there is no need for them to apply state license as pay fishing site usually occur on private land, (Ritter, 1992).

Day by day, pay fishing site is developing as major market in improvising and promoting other pay fishing business, (Roe et al., 1994). This is due to attractive advantages that pay fishing site has. For example, good pay fishing site has sufficient amenities such as toilet, food stall, resting hut, bench and prayer room that enable recreational anglers to feel comfortable when they go fishing to this place. Furthermore, Wolos, (1998), stated that for recreational anglers who do not possess enough time to travel to remote fishing spots, fishing at pay fishing site is a wise, alternative choice that offers good quality of fishing experience.

On the contrary, there are some disadvantages of pay fishing site that make some recreational anglers think to not choose this site as fishing spot. For instance, Shaner, (1996), reported that several pay fishing sites tend to charge recreational anglers with inconsiderably high rate of fee. The fee is inconsiderably high as the condition and fishing setting at those places are usually not worthy with the fee. Moreover, many pay fishing sites, especially at urban area, are low in esthetic values that make fishing experience at these sites poor in quality part, (Nielsen, 1999).

### **Method**

#### **Study Area**

This study was conducted at Seri Bayu Tekala Pay Fishing Pond, Semenyih, Selangor, Malaysia for 7 weeks from 8 February 2010 until 26 March 2010. The fishing site is open to recreational anglers every day, of the week, for 24 hours. The fishing fee impose on each angler is RM 22 per fishing rod, for which the angler is allowed to fishing for 4 hours. The fishing site was built in early 2000 and it is consisted of 14 ponds, where 5 of them can be used when the fishing competition are held. The fishing pond at there is various in sizes, ranging 0.5 to 2 acres. The fishing site is personally own by the manager, Mr. Abdul Aziz bin Mat Sari. According to one of workers at there, the pond is stocked with various local species of freshwater fish.

#### **Data Collection**

Data were collected through angler survey of fishing themes sought by recreational anglers at Seri Bayu Tekala Pay Fishing Pond. The instrument of data collection in this angler survey will be questionnaire forms that contain scalar questions about their preference toward 17 commonly fishing themes. All of these themes were measured by using 7-point Likert scale ranging from 1 (completely disagreed) to 7 (completely agreed) with 4 being a neutral or no opinion. In this study, a total number of 100 questionnaire forms were distributed to the 100 recreational anglers that were randomly selected at Seri Bayu Tekala Pay Fishing Pond.

The data that that were collected in this study were analyzed by using Statistical Package for the Social Science (SPSS) software version 17.0.

### **Result and Discussion**

Mean support level for 17 fishing themes commonly sought by recreational angler was tabulated in TABLE 1. The 17 themes that were exploited in this study were listed as: (1) enjoying natural environment at fishing spot, (2) rest or relax while fishing, (3) spend time with friends while fishing, (4) spend time with family while fishing, (5) learn to patience while fishing, (6) improve fishing skills that anglers already had, (7) bring back all fish that had been caught as food for anglers' family and anglers, (8) catch the largest fish for satisfaction in fishing, (9) sell all fish that had been caught as source of income, (10) enjoy the excitement when the fish are caught, (11) want prize or jackpot from ponds' owners for largest catch of fish, (12) release back all fish that had been caught as satisfaction in fishing (13) release back some of fish that had been caught as satisfaction in fishing (14) see and meet other anglers, (15) escape for a while from pressure at house and work place, (16) get relaxation of mind while fishing and (17) make fishing habit as one form of sport.

Numerous fishing spots usually have pristine natural environment that can be enjoyed by anglers. The anglers in this study indicated mean agree value of 4.86 (Theme 1) which indicated that they slightly agreed in enjoying natural environment at fishing spots. Recreational anglers prefer to rest or relax while fishing in order to escape from their daily chores. The anglers in this study indicated mean agree value of 5.01 (Theme 2) which indicated that they were agreed in resting or relaxing while fishing. The results showed that the anglers were motivated to fishing because they can rest and relax. Some recreational anglers tend to invite their friends when they go fishing. The anglers in this study indicated mean agree value of 4.17 (Theme 3) which indicated that they were slightly agreed in spending time with friends while fishing.

Nowadays, recreational anglers prefer to spend time with their family by fishing together. This activity cans tighter the bond between the anglers and their family. However, the anglers in this study indicated mean agree value of 3.95 (Theme 4) which indicated that they slightly disagreed in spending time with family while fishing. This result is not surprised because most recreational anglers tend to fishing alone without their family disturbance. Fishing can be known as good activity in practicing patience behaviour. The anglers in this study indicated mean agree value of 4.74 (Theme 5) which indicated that they slightly agreed in learning to patience while fishing.

Some recreational anglers like to fish more often because they want to improve fishing skills that they already had. The anglers in this study indicated mean agree value of 4.95 (Theme 6) which indicated that they agreed in improving fishing skills that they already had. The result showed that the anglers were motivated to fishing because they can enhance their fishing skills. After fishing, many anglers prefer to bring back all fish that had been caught as food for their family. The anglers in this study indicated mean agree value of 4.44 (Theme 7) which indicated that they slightly agreed in bringing back all fish that had been caught as food for their family and themselves.

When the largest fish had been caught by anglers, especially recreational anglers, it will bring satisfaction experience for them. The anglers in this study indicated mean agree value of 5.33 (Theme 8) which indicated that they agreed in catching the largest fish for satisfaction in fishing. The result proved that the anglers were preferred to fishing because there are chances to get big fish that will give satisfaction for them. There are several anglers that prefer to sell all fish that had been caught as source of income. The anglers in this study indicated mean agree value of 3.37 (Theme 9) which indicated that they were slightly disagreed in selling all fish that had been caught as source of income.

Most recreational anglers will be thrilled and excited when the fish are caught. The anglers in this study indicated mean agree value of 5.23 (Theme 10) which indicated that they were agreed in enjoying the excitement when the fish are caught. The result showed that the anglers were motivated to fishing because they can seek fun and excitement in fishing. Numerous number of pay fishing ponds' owners provides prize or jackpot for largest catch of fish by anglers that are fishing at their pond. The anglers in this study indicated mean agree value of 4.11 (Theme 11) which indicated that they slightly agreed in wanting prize or jackpot from ponds' owners for largest catch of fish.

Recreational anglers who are concerned about environment usually apply catch and release concept as part of their fishing themes.

The anglers in this study indicated mean agree value of 3.63 (Theme 12) which indicated that they were slightly disagreed in releasing back all fish that had been caught as satisfaction in fishing. The results showed that most anglers were not prefer to release back all of their catch because they still want to consume some fish that had been caught by them. Release some of fish that had been caught is a good practice or habit in sustaining aquatic ecosystem. The anglers in this study indicated mean agree value of 4.09 (Theme 13) which indicated that they slightly agreed in releasing back some of fish that had been caught as satisfaction in fishing.

When anglers go to any fishing spots, they can meet other anglers in order to exchange fishing skills and experiences. The anglers in this study indicated mean agree value of 4.10 (Theme 14) which indicated that they were slightly agreed in seeing and meeting other anglers. The results showed that most anglers were motivated to meet other anglers as they can improve their fishing skills by watching other anglers fishing. A lot of people escape from their hectic life by doing activities that can ease their tension at house and work place. The anglers in this study indicated mean agree value of 4.77 (Theme 15) which indicated that they slightly agreed in escaping for a while from pressure at house and work place.

Relaxation of mind is what many recreational anglers desire whenever they go fishing. The anglers in this study indicated mean agree value of 5.07 (Theme 16) which indicated that they were agreed in getting relaxation of mind while fishing. The results were not surprise as most anglers in this study classified themselves as recreational angler. The assumption or perspective of fishing habit as one form of sport by recreational anglers had made fishing activity popular among all walks of life. The anglers in this study indicated mean agree value of 4.59 (Theme 17) which indicated that they slightly agreed in making fishing habit as one form of sport.

### **Conclusion**

Out of 17 fishing themes that were asked to the anglers whether they were agreed to the themes or not, we can see that only 3 fishing themes were disagreed by the anglers. The mean for fishing themes that were agreed by the anglers were ranged from 4.09 to 5.33 while the mean for fishing themes that were disagreed by the anglers were ranged from 3.37 to 3.95. Most anglers in this study did not agree in spending time with family while fishing, selling all fish that had been caught as source of income and releasing back all fish that had been caught as satisfaction in fishing.

It is recommended that the management of any pay fishing sites take necessary actions regarding the results from this study. For example, they can improve their facilities and stock more variety and quantity into their fishing ponds as to enhance the satisfaction level of recreational anglers that go to their fishing sites. Hence, from the findings of this study, the government and certain non-government organization (NGO) can increase the management level of recreational fisheries in Malaysia by knowing the exact fishing themes that recreational anglers sought after whenever they go fishing. Moreover, it is hoped that for future research, especially involving recreational fisheries management, the researchers should use the same variables in different recreation things as to make the results more accurate and precise.

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**Table 1: Mean Support Level for Themes or Interesting Experiences that are sought by Recreational anglers at Seri Bayu Tekala Pay Fishing Pond, Semenyih in Selangor, Malaysia**

<b>Themes</b>	<b>Mean</b>	<b>S. Deviation</b>
1.Enjoying natural environment at fishing spot	4.86	1.255
2. Rest or relax while fishing	5.01	1.446
3. Spend time with friends while fishing	4.17	1.518
4. Spend time with family while fishing	3.95	1.728
5. Learn to patience while fishing	4.74	1.116
6. Improve fishing skills that anglers already had	4.95	1.344
7. Bring back all fish that had been caught as food for anglers' family and anglers	4.44	1.272
8. Catch the largest fish for satisfaction in fishing	5.33	1.187
9. Sell all fish that had been caught as source of income	3.37	1.447
10. Enjoy the excitement when the fish are caught	5.23	1.024
11. Want to get prize or jackpot from pond's owner for largest catch of fish	4.11	1.228
12. Release back all fish that had been caught as satisfaction in fishing	3.63	1.337
13. Release back some of fish that had been caught as satisfaction in fishing	4.09	1.107
14. See and meet other anglers	4.10	1.667
15. Escape for a while from pressure at house and work place	4.77	1.503
16. Get relaxation of mind while fishing	5.07	1.350
17. Make fishing habit as one form of sport	4.59	1.156