

Children's Understanding of the Fishing Profession: A Review of Perceptions, Motivations, and Required Skills

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Abstract. This study aims to analyze children's understanding of the fishing profession in coastal areas, focusing on their perceptions, motivations, and the skills they perceive as essential for this occupation. A qualitative descriptive approach was employed, involving a survey of 100 children residing in coastal regions. The primary research instrument was a questionnaire covering various aspects such as risk perception, interest in the fishing profession, and relevant skills. The findings reveal that a majority of the respondents exhibited a low interest in pursuing a career in fishing. The primary reasons cited for this disinterest were income instability, high physical risks, and the demanding nature of the work. Consequently, strategies are needed to enhance the appeal of the fishing profession among the younger generation. These strategies could include skill-based training programs and awareness campaigns highlighting the profession's critical role in maintaining coastal ecosystem sustainability.

1 Introduction

Fishing is one of the oldest professions, integral to global food security and the livelihood of millions. Historically, fishing has been the cornerstone of the Blue Economy, providing the largest employment [1]. Despite challenges such as overfishing and competition from aquaculture, fisheries remain vital for coastal communities, offering sustenance and economic stability [2]. The significance of this sector is underscored by its role in addressing global food shortages, especially as the world's population grows, with aquaculture emerging as a crucial supplement to wild capture [3]. Sustainable management practices are essential to balance economic viability, social well-being, and environmental conservation, ensuring the long-term health of marine resources [4].

The fisheries sector is vital to Indonesia's economy, with coastal communities heavily reliant on fishing for their livelihoods. This sector contributes approximately \$26.9 billion annually, accounting for about 2.6% of the national GDP and providing over 7 million jobs, while also supplying 50% of the country's protein needs [5]. Coastal villages, such as Gampong Lampulo, demonstrate the potential of marine resources to improve people's

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welfare and support sustainable development goals, despite challenges such as high fuel prices and environmental uncertainties. Furthermore, the development of the fisheries sector is intertwined with the concept of the blue economy, which emphasizes sustainable management of marine resources to enhance economic growth and resilience to the impacts of climate change [6]. However, the well-being of fishermen remains a concern, requiring policies that protect their rights and promote sustainable practices to ensure long-term livelihoods [7].

Fishermen face numerous challenges, including significant safety risks, income instability, and limited access to technology and education. Fishermen often work in hazardous conditions, with accident rates three times higher than those of land-based workers, exacerbated by factors such as poor working environments and high psychosocial risks [8]. Additionally, many fishermen, especially in areas like Lake Bardawil, experience low incomes and high illiteracy rates, with most lacking formal training, hindering their ability to adapt to modern fishing practices [9]. The absence of effective agricultural extension services further exacerbates this problem, leaving fishermen without essential technical support [10]. Furthermore, the adoption of safety technologies, such as wearable devices to prevent collisions, remains limited, highlighting the need for improved safety measures [11]. Overall, these challenges underscore the urgent need for comprehensive policies and support systems to improve the well-being and safety of fishermen globally [12].

The declining interest of young people in pursuing fishing as a profession is influenced by various socioeconomic factors and environmental challenges. Research shows that many young individuals perceive fishing as a low-status job with inadequate financial returns, poor working conditions, and high operational costs, leading them to seek alternative career paths [13]. Additionally, in areas like Desa Banyutowo, the erosion of maritime culture and parents' reluctance to encourage fishing careers further exacerbates this trend, resulting in a generational crisis within fishing communities [14]. In Newfoundland, the collapse of fish stocks has negatively impacted young people's perception of fishing jobs, as they associate it with instability and limited opportunities, despite acknowledging its cultural significance [15]. Collectively, these factors contribute to a generational shift away from traditional fishing livelihoods, threatening the sustainability of coastal communities that depend on this industry [16].

The low interest of young people in pursuing fishing careers can be attributed to various factors, as highlighted in recent research. In Alaska, young people's attitudes towards fishing are significantly influenced by their family ties to the industry, personal experiences, and community involvement, with positive perceptions related to the importance of subsistence fishing [17]. Similarly, a study in Kuala Besut, Malaysia, identified that moderate interest among youth is shaped by training programs, perceived benefits, and marketing opportunities [18]. In marginalized communities in the Gulf of Mexico, motivations for engaging in small-scale fisheries include education, skill levels, and self-identification as fishers, with economic factors playing a significant role in their decisions [19]. Additionally, perceptions of job security, income, and work comfort were found to significantly influence interest in aquaculture careers in Indonesia [20]. Lastly, while rural children in Nigeria actively participate in fishing activities, their involvement does not reduce their educational activities, indicating a complex relationship between fishing involvement and future career interests [21]. Collectively, these studies underscore the diverse influences on young people's perceptions and motivations regarding fishing professions.

2. Methodology

2.1 Research Design

A research methodology employing a quantitative descriptive approach effectively assesses children's understanding of the fishing profession by examining their perceptions, motivations, and required skills. This approach aligns with findings from previous research highlighting the importance of youth attitudes towards fishing, revealing that positive perceptions are often linked to personal experiences and community ties to fishing. Moreover, the shift of interest from the fisheries sector to other sectors among youth indicates a decline in relevant skills and knowledge, emphasizing the need for targeted educational interventions. Motivation to participate in small-scale fisheries is influenced by factors such as education, skill levels, and income, which is crucial for understanding children's involvement in fishing activities. Overall, the structured survey data collection method allows for a comprehensive analysis of children's interests and views, providing valuable insights for future fisheries management and educational strategies [22].

2.2 Population and Sample

The population in this study consists of children in Berakit who have been exposed to the life of fishermen, with a sample randomly selected to represent this population. Simple random sampling was used to ensure a balanced representation of the children's diverse social and economic backgrounds. The sample size for this study is 100 children, comprising middle school students in the Berakit area. Respondents were selected based on age criteria and their experience in a fishing community, with the aim of obtaining richer and more representative perspectives. Respondents were also informed about the research objectives and were asked to provide honest answers based on their experiences and perceptions.

2.3 Data Collection Techniques

Data was collected from 100 child respondents aged 10-15 years living in the Berakit area. Data collection was conducted directly by distributing questionnaires to respondents through meetings at schools and local communities. Prior to completing the questionnaires, the researcher provided a brief explanation to the respondents about the purpose and importance of this research to ensure adequate understanding. The questionnaires were completed in a conducive atmosphere and supervised by the researcher to avoid bias and ensure the validity of the data obtained.

2.4 Data Analysis

Data collection in this research employed a quantitative survey method, utilizing a closed-ended questionnaire as the primary instrument. The questionnaire was designed using a Likert scale to measure perceptions, motivations, and skills relevant to the fishing profession among children residing in coastal areas. The instrument encompassed several categories of questions, including perceptions of the risks associated with fishing, interest in the fishing profession, views on financial stability, and specific skills considered essential for becoming a fisherman.

3 Results and Discussion

3.1 Results

Survey data indicates a low interest among children in the fishing profession, with a majority of respondents expressing disinterest in the occupation. Many of them aspire to other professions, such as becoming teachers or farmers, which are perceived to be more financially stable than fishing. Additionally, children view the life of a fisherman as a difficult and risky job, particularly when facing bad weather and large waves. The motivation to choose other professions is generally driven by economic instability and physical challenges, with additional reasons including fear of natural hazards, such as drowning or seasickness. Respondents also mentioned significant challenges for young fishermen, including difficulties in finding fish, the risk of getting lost at sea, and other mental and physical challenges. Although some children recognize the importance of specific skills such as fishing, netting, and swimming to become a fisherman, they show varied views regarding the need for formal education. Some children feel that education is not important in this profession, while others believe that education can improve the skills and safety of fishermen. The low enthusiasm for the fishing profession is also reflected in the minimal suggestions to attract the younger generation. Some respondents suggested preserving marine culture as a way to increase the attractiveness of the fishing profession, although most admitted they did not know how to increase young people's interest in this profession.

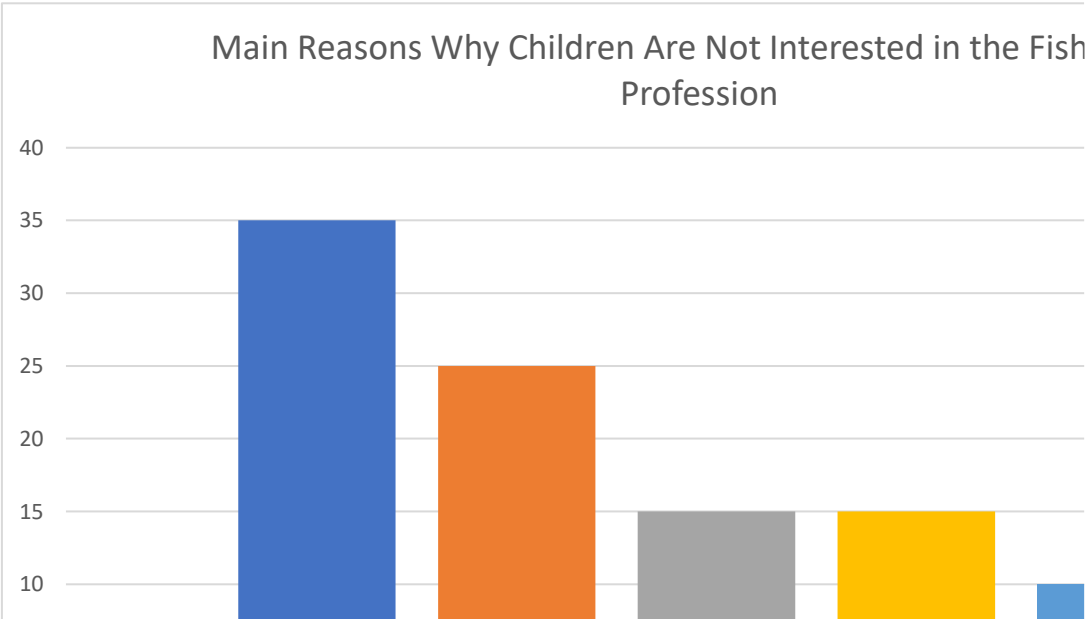


Fig. 1. Primary Reasons Why Children Are Not Interested in the Fishing Profession

Figure 1 Primary Reasons Children are Not Interested in the Fishing Profession outlines five main reasons cited by respondents. Economic instability was the most significant factor

(35%), followed by fear of drowning (25%), seasickness (15%), bad weather (15%), and health risks (10%). These reasons reflect concerns about safety as well as the low economic and social status associated with this profession.

3.2 Discussion

This study reveals a low level of understanding and a negative perception of the fishing profession among children. The majority of respondents expressed a low interest in becoming fishermen in the future, driven by their perceptions of unstable income, physical risks, and the natural challenges faced by fishermen. The younger generation tends to avoid occupations perceived as high-risk and economically uncertain. The low interest of children in the fishing profession also indicates a shift in values in coastal communities, where fishing is increasingly seen as less attractive compared to other professions perceived as safer and providing more stable income.

Furthermore, negative perceptions towards the fishing profession are influenced by their knowledge of the difficult working conditions, such as facing storms, big waves, and other safety challenges at sea. Children seem to have a good understanding of the various risks that fishermen have to face, even though most of them do not have direct experience in this profession. This indicates that information about the risks in the fishing profession is widely disseminated in society, both through family experiences and stories from the surrounding environment. This perception has the potential to hinder the regeneration of the fishing profession in the future, which could lead to a decrease in the number of local fishermen and, ultimately, the sustainability of the fisheries industry in the region.

In terms of skills, most children understand that the fishing profession requires specific abilities such as swimming, netting fish, and reading weather patterns. However, there are varying perspectives on the importance of formal education for a fisherman; some children feel that formal education is not very relevant, while others recognize the importance of additional skills and education to improve safety and work efficiency. This lack of awareness suggests that socialization regarding professionalism in the fishing profession is still low. Therefore, the government and educational institutions can play a role in introducing the concept of modern skills and safer and more efficient fishing techniques as an effort to increase the attractiveness of this profession among the younger generation.

Overall, this research highlights the need for social and educational interventions to enhance positive perceptions of the fishing profession among children. Education about the importance of this profession for local food security and economy can be an initial effort in cultivating pride and motivation for children to continue this profession. This effort is expected not only to increase the interest of the younger generation in the fishing profession but also to ensure the sustainability of coastal ecosystems and marine resources in the future.

4 Conclusion

Survey data indicates that children have a low interest in the fishing profession, with a majority of respondents expressing a lack of interest in this career. Many of them aspire to other professions, such as becoming teachers or farmers, which are perceived as more financially stable than fishing. Additionally, children view the life of a fisherman as a difficult and risky job, particularly when facing adverse weather conditions and large

waves. The motivation to choose other professions is generally driven by economic instability and physical challenges, with additional reasons including fear of natural hazards such as drowning or seasickness. Respondents also mentioned significant challenges for young fishermen, including difficulties in finding fish, the risk of getting lost at sea, and other mental and physical challenges. Although some children recognize the importance of specific skills such as fishing, netting, and swimming to become a fisherman, they show varied views regarding the need for formal education. Some children feel that education is not important in this profession, while others believe that education can improve fishermen's skills and safety. The low enthusiasm for the fishing profession is also reflected in the minimal suggestions to attract young people. Some respondents suggested preserving marine culture as a way to increase the attractiveness of the fishing profession, although most admitted they did not know how to increase young people's interest in this profession.

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