

## Impact of Personality traits on work performance in tidal paddy production in the Gambia: A Review

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**Abstract:** Efficient personality is central for effective work performance in tidal paddy farming. Improve rice productivity in the Gambia is essential for stakeholders as it is main actor in achieving food self-sufficiency and security. The aim of this paper is to confirm the impact of personality traits on work performance. Furthermore, to determine the relation between the personality traits for the paddy farmers with work performance; and also to identify the strength of the traits relation with work performance for paddy farmers. This paper uses previous works on personality traits, work performance, and its related studies and looked at how the seven personality traits (willingness to take risks, information seekers, problem solving ability, willingness to spend on capital, extensive network of information, dare to make decisions, and highly disciplined) of paddy farmers and work performance can be used to boost urban food supply through rice production. The need for appropriate development programs is required as one of the options to generate income and improve livelihood of farmers in developing countries.

**Keywords-** work performance, personality traits, paddy farmers, paddy production, tidal

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### I. Introduction

Tidal paddy production is one of the most effective and efficient ecology for maximum rice yield. Paddy rice is grown in agro ecosystem from rain fed to coastal wetlands. As water availability been the strength of it adaptive mechanism. Wetland play a vital role in paddy yield productivity, tidal paddy yield higher than the rain fed rice [1]. World is currently producing significant amount of paddy produce in irrigated system about 75% of its production and the average yield in Africa is estimated at 4.9 Mt/ha, which is higher as compare to 2.2 Mt/ha under the rain fed areas [1]. Paddy is the most important food crop for almost half of the world population [2]. The potential yield of tidal paddy has been the greatest factor of concern for the Gambia government in achieving the nation food self-sufficiency and food security. This has pave a way by investing in tidal irrigation schemes in the country through expansion and rehabilitation of irrigation infrastructures. The national rice production targets for milled rice production for 2020 is set at 315,000 Mt, this is from the bases on a national population of 1,882,450 at an annual population growth rate of 2.7%; per capita consumption of 117 kg milled rice per annum [3]. Currently, report by [4] highlighted that the country's average production is below the potential yield, averaging only 1.5 Mt/ha. Several factors has been highlighted as the main cause including paddy farmers' personality which has great impact on their performance [1]. Among the major causes of low performance in paddy production often sited are low investment, farmers' unwillingness to take risk, discipline level towards production, farmers' knowledge on solving emerging problems at field level, lack of networking with stakeholders, low attitude for seeking information on production, and their ability to make quality and timely decision [5]. Poor work performance in paddy production has contributed to low-income levels of smallholders and persistent high level of poverty which has contributed to high level of food insecurity [6].

In the Gambia, rice is a staple food and measures to improve it production and productivity are vitally necessary. However, there is no literature on to what extend has the personality of the paddy farmers has impacted their performance in the Gambia. Thus, the need for baseline on the status of paddy farmers' personality and work performance.

## **II. Personality Traits**

Personality traits are a very distinct talents or characteristics that are habitual ‘driver behaviors’’. It has to do with the way people behave, exhibit temperament and display their emotion. Recent works clearly stress the effect of personality on some important components of people’s status and they include but not limited to economic achievement, educational level, and nature of occupation [7]. In considering the relationship that exists between personality and production performance, it is very necessary to admit that an individual’s personality traits may have a very important correlations with their successes and the way it is being perceived. However, empirical literature can only give us little information on the interaction that takes place between objectively measured production performance and personality traits. Also, in some studies, hypotheses were generally tested to show that personality traits play a significant role in the entire success of the people by creating an effect on their socio-economic condition. Several works by [8], [9] reported personality traits as predictors of several outcome variables which include success achieve through academic and economic processes and also documented that personality measures are as predictive as classic cognitive measures, even after controlling for family background and cognition. Giving an overview of the effect of personality on earnings, individuals’ self-esteem which is the perception of people about their own ability contributed to their earnings or performance [10]. According to [11], personality characteristics significantly affect entry into self-employment and survival of self-employed persons, stating that the explanatory power of personality variables is comparable to that of education, which is one of the key determinants of success.

## **III. Personality traits of Paddy Farmers**

In this section, we analyze how much traits and personality characteristics add to the work performance. Furthermore, we assess if including the Big Five construct is sufficient to capture the influence of personality, or if the specific personality characteristics, significantly contribute to the explanatory power of the models.

In the effect analysis of personality constructs, there are two approaches, either using general personality traits, in particular the ‘‘Big Five’’-model, or using specific personality characteristics. The Big Five taxonomy arranges a variety of personality variables into a concise personality construct [12]. Some argue that, for reasons of reliability and validity, this taxonomy is better able to identify the relevant relationships between personality and production performance than more specific characteristics. Others emphasize that this general traits approach is not sufficiently related to production tasks [13]. As [5] point out, specific ‘‘traits rely on explicit description of production activities that may be situated in time, place and role,’’ which is why specific characteristics such as (1) information seekers, (2) willingness to take risks, (3) capable of producing high capital, (4) able to solve the major problems, (5) extensive network of information, (6) dare to make decisions, and (7) highly disciplined are more useful in predicting paddy farmers’ performance than the Big Five. The study by [14] found that knowledge, attitudes and practices affect the adoptability level of good agricultural practices in improving production.

### **3.1. Willingness to take risk**

Personal willingness to take risks determines to a great extent that they are prepared to accept factors that have negative effect on production. This must be differentiated from their objective ability to take risks. Knowing the socio-economic condition of the rice farmers in Central River Region, then risk taken in production could serve as a serious challenge due to limited available resources thereby refrain from taking a decision of uncertainty. [9] supported that when farm income is at high proportion of total household income, it has a negative effect on the farmers’ willingness to take risk in new practice because of the fear of unknown.

Farmers will be willing to participate in an innovation program that has a financial compensation that fully covered the associated costs of participation, there will be interest from the farmers’ to join the scheme as is risk free [15]. Nevertheless, it is easier to implement the required measures of lowering the cost of adoption and this will motivate farmers to adopt a technology in order to improve production [9]. [16] confirmed that age was assumed to be a significant variable in most studies, to the extent that young farmers are more willing to take risks and are therefore more inclined to shift to new production techniques.

### **3.2. Information seeker**

These are farmers who ask for clarification on some comments in terms of their factual adequacy; they requested for information or facts that is relevant to the problem and also needs suggested information before decision making. Farmers who are well informed about any production techniques are more likely to have increase in production compared to the one without adequate information, it means making information readily available on best production practices will reduce their search costs, and therefore may leads to overall increase in production [17]. Social networks are very important to producers as this made valuable information available to the farmers’, work source, innovation, financial and personal support. As at today, the importance of social

networks for rice producers is becoming more evident as they provide access to larger part of society. When the communication channels between the producers are open, the trust amongst them increases, the social needs can be openly and easily stated and resolutions achieved.

### **3.3. Ability to solve problems**

Problem solving refers to the ability to use knowledge, facts, and data in providing solution to problems. The answer might not be immediate but will have a long term effect; this means one must be able to think to assess problems that will results to an outcome by providing the needed solutions. The ability of a farmer to develop a well thought out solution within a reasonable time frame makes easy and quick accomplishment of a task. In order to do this, they must be able to identify, analyze the situation and generate process to solve such problems. These are the thinking or creative requirements of increasing productivity, to achieve this, the farmer's needs only and accurate information on the real cause of the problem. To confirm that information is accurate, it needs to be valid enough to determine its authenticity. Nonetheless, farmers must use accurate information at their disposal, reliable judgment as well as making educated assumptions about the causes of any problem and finally determine which course of action to be taken to achieve success.

Farmers may find it difficult to disclose their problems to other colleagues if there is no trust that exist among them. Moreover, it is very important for rice producers to be involved in activities that have high level of social skills such as establishing teams who believe in problem solving. It may be expected from outgoing people to be more interested in and successful at the following matters of production activities: sustainability and creating financial income through activities which require good personal relationships such as sales and marketing, creating new sources etc.

### **3.4. Willingness to invest**

Investors that are careful will take decisions based primarily on their feelings and at the same time very sensitive to any form of investment losses. Fear drives their investment decision making process. There is a serious challenge in making proactive decisions regarding their investments since they do not trust others. As a result of this, their portfolios usually have low turnover and include mostly safe investments [18], farmers that are successful tends to make decisions based on hard facts and do not allow guessing to take pre-eminence regarding their investments whenever decision is to be taken. This kind of farmers have independent thinking and belief in what they do with a lot of trust in their investment research and this has made them to be a risk taker, differentiating them from others. They are usually regarded as being self-made and hardworking farmers. Recent studies was of the opinion that fostering social capital may be a good driver for increasing farmers' willingness to invest in sustainable agriculture [19]. As reported by [15]; [20] land tenure is significantly related farmers' willingness to invest on land to improve its condition. Both studies suggested that long-term contracts are less likely to be agreed if a high proportion of land on the farm is rented. This may be due to uncertainty about the future or because an agreement between landlords and tenants is required before such a contract is signed. Farmers with little or no off-farm income were less likely to invest, perhaps because production involves the intensification of farm activities and this brings with it a risk of income reduction [21]. [16]; [9] suggested that the economic position and expectations of future economic prospects of the farm plays a very important role in farmers' willingness to invest. Conversely, the more dependent the household was on-farm income, the less likely to invest on farm activities.

### **3.5. Possess wide information network**

Important channels for obtaining information include technical advisors, extension services, social and agriculture-related organizations, technical media, and government. However, the use of technical advice or extension services plays a positive role in farmers' production performance, and in support. [15]; [22] finalized that farmers who read the farming press have been said to perform better. High quality messages and high levels of institutional trust, along with a trusted individual to communicate the message such as farm advisor, could serve as the best way to attitudinal change in improving productivity [23]. Trust increases when the information stimulate the positive externalities of farming, and at the same time reduce associated monitoring and control costs [24]. According to [25] achieving medium or higher level of educational attainment positively influenced farmers' performance in production. Farmers' experiences has been shown in several studies to have a significant effects on farmers' performance [16]; [26]. Also, [15] described the important role played by the opinions and experiences of neighboring farmers in influencing new entrants' willingness to production practice. They suggested that the influence exerted by neighboring farmers reflects the strong relationships and cultural norms that exist in many rural areas.

A clear institutional design and a stable policy for future periods can reduce farmers' resistance to adopting technologies which can lead to improve production [27], most importantly such is the case where there is uncertainty about the possible introduction of more restrictive alternatives or mandatory policies [16].

Furthermore, the greater the institutional credibility and personal trust on the part of the advisors, the more likely they adopt new technology [23].

### **3.6. Dare to make decision**

Decision-making is a very important factor credited to any successful farmer. The ability to make sound and timely decisions serves as a key factor in determining the differences between a progressive and non-progressive farmer. Farmers own the responsibility to make an important decision that needs to be implemented as quickly as possible in a stylish way. After they might have carefully analyzed the possible course of action using all available information, there is need to put productions along with emotions into consideration. The decision-making process should not be seen as objective and mathematical formula. Human mind can be rational and intuitive because decision making process is a thought in a process.

[17] reported that conservative-oriented motivations for participation in rice production can play an important role in farmers' decision making processes during the production. Consequently, some research has also demonstrated that when there is a positive attitudes towards adoption of environmental friendly farming practices, it enhance the adaptive behavior of the farmers [9]. Similarly, the work of [28], [29] suggested that some farmers are conscious and aware of the likelihood of the judgment and criticism from their colleagues if activities carried out is not in conformity with the cultural norms or their expectations. The circumstances result to poor communication and mutual understanding among neighboring farmers [29] and may hamper their decision making ability. Also, [28] continues by saying this may reduce their motivation to adopt practice that can improve their production. [30] also pointed out that environmental awareness has positive effect on farmers' decisions making ability and that their behavior cannot be generalized, because in some cases the willingness to adopt new production techniques is not a sign of altruistic behavior, since farmers also receive utility (satisfaction) from the provision of public goods.

### **3.7. Highly discipline**

Self-discipline is a pattern of behavior that has to do with the ability to pursue what one think is right despite some challenges on their way. This is a special quality that one can develop to achieve success as well as improved production. This quality or practice will do more to assure that you achieve sustainability and high productivity. This is very important to the extent that if not developed, it will be difficult to achieve what you are truly capable of doing. A research was conducted on personality traits of majority paddy farmers in MADA, Kedah [31]. The study shows that the character of highly discipline is the most effective characteristic that influence the performance of the majority paddy farmers. [25] identified three characteristics of farmers that suggest an open-minded attitude towards production, i.e. high levels of education, participation on non-agricultural activities, and trust in the government, it was thereby suggested that these characteristics may make farmers more willing to improve their production level. [15]) however, found that higher levels of education were not linked to farmers' production performance. Instead, their study identified farmers' working experience as the main factor that contributes to positive working attitude. [9] reported in their study by associating practical implementation to age. They discovered that younger and educated farmers are more likely to apply good production practices and that older farmers might not show willingness to adopt good practice as they prefer their normal traditional low intensity farming system.

## **IV. Personality And Work Performance**

Personality and performance would address three important issues: "He/she is very competent", "He/she gets his or her work done very effectively" and "He/she has performed his/her job well". Attitude towards work is a personality variable important in assessment of the job capacities and work performance, as in job performances prediction in rice production. Efficient behavior of a farmer depends on his knowledge, attitude, and practice. All these components interact in a psychological pattern that is influenced by the production strategy. Generally, the concept of attitude is defined as a consistent tendency to react in a particular way, positively or negatively, favorable or unfavorable. Attitudes have different degrees of stability. Thus, some attitudes are stable, characteristic for individual's personality and situated nearby the personality traits level, that makes them very hard to change of lifelong, just as are deeply anchored attitudes in the structure of personality and developed as result of the social and cultural factors (attitude towards work), or marginal and secondary attitudes, changeable under the influences of social and personal experience [31].

## **V. Conclusion**

From the limited literature, personality traits are positively related with job performance in virtually all jobs. Of these seven traits, analyses have suggested that highly discipline is somewhat more strongly related to overall job performance than rest. Indeed, it is hard to conceive of a job where it is beneficial to be careless, irresponsible, lazy, impulsive and low in achievement striving (low discipline). Therefore, farmers with high

scores on discipline should also obtain higher performance at work. Similarly, being anxious, hostile, personally insecure and depressed (low decision maker) is unlikely to lead to high performance in production. Thus, we expect that highly discipline and ability to make decision will be positively related to overall performance in paddy production.

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