

Leadership Behavior of Local Rural Leaders and Its Relationship WITH THE INDEPENT VARIABLES to Selected Personal and Social Variables in Baiji District, Salah Al-Din Governorate IN LRAQ

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Abstract

Rural local leaders occupy a pivotal intermediary role in agricultural extension systems, yet empirical evidence on the level and structure of their leadership behavior in Iraqi rural contexts remains limited. This study aimed to assess the overall level of leadership behavior among rural local leaders in Baiji District, Salah Al-Din Governorate, Iraq; examine inter-domain correlational relationships; and identify personal and social variables associated with behavioral variability. A structured questionnaire measuring four leadership behavior domains — general human and social relations, boldness in work and decision-making, administrative leadership, and guidance and counseling — was administered to a proportional random sample of 100 leaders drawn from a population of 333 (tribal sheikhs, village mukhtars, agricultural extension agents, and farmers' association members). Instrument reliability was confirmed by a Cronbach's alpha of 0.86 and a validity coefficient of 0.927. Data were analyzed using Pearson correlation, independent t-tests, and one-way ANOVA. Results indicated that 52% of respondents demonstrated high leadership behavior, 41% moderate, and 7% low, with an overall mean of 232.09 (SD = 9.52). Statistically significant positive correlations ($p \leq 0.01$) were observed among all four behavioral domains, with the strongest association found between administrative leadership and guidance and counseling ($r = 0.506$). Educational level, conviction in the leadership role, readiness for change, and attitude toward local leadership work were significant differentiating variables, whereas age, role duration, and workplace location yielded no significant differences. These findings suggest that effective rural leadership development requires holistic, multi-domain training interventions tailored to leaders' cognitive and attitudinal profiles rather than relying on social position alone.

Keywords: rural leadership; leadership behavior; agricultural extension; Baiji District; behavioral domains; rural development; leadership training.

Introduction

The agricultural sector occupies a pivotal position within the economic and social structure, particularly in developing societies, given its fundamental role in strengthening food security, raising living standards, generating income, and absorbing a significant proportion of the labor force. Moreover, the development of this sector is no longer a developmental option of limited impact; rather, it has become a strategic imperative for achieving sustainable development, in view of its contributions to supporting the gross domestic product, supplying raw materials for industries, alleviating poverty, expanding employment opportunities, as well as its role in environmental protection and the promotion of societal stability.[6]

Agricultural extension is regarded as one of the most important institutional mechanisms supporting the development of the agricultural sector, as it performs a central communicative function linking agricultural research institutions with farmers, transferring to them relevant knowledge, recommendations, and technical innovations, while simultaneously conveying the practical challenges faced by farmers to the competent research authorities. From this perspective, the significance of agricultural extension becomes evident in its capacity to persuade

farmers to adopt modern agricultural practices suited to their productive and social conditions, thereby contributing to both quantitative and qualitative improvements in productivity and to the elevation of their knowledge and living standards.[11]

In this context, rural local leadership constitutes an active element in supporting extension work and achieving agricultural development objectives, given that local leaders serve as a connecting link between extension agencies and farmers, drawing upon their social standing, community trust, and capacity to influence and guide the behavior of others. Furthermore, the affiliation of these leaders with the rural environment and their familiarity with its social and productive characteristics afford them a greater capacity to facilitate the diffusion of novel agricultural ideas, encourage farmers to adopt them, and foster community participation in local developmental activities.[10]

The effectiveness of rural local leaders is not determined merely by their occupancy of formal or social positions within the community; rather, it is largely contingent upon the nature of the leadership behavior they exercise in practical reality. Leadership behavior reflects the actual patterns of interaction employed by the leader in building human and social relationships, making decisions, managing local

activities, and directing and guiding individuals toward the achievement of shared objectives. Accordingly, the study of leadership behavior represents an important scientific entry point for understanding the efficiency of rural leadership and diagnosing its capacity to mobilize and channel local efforts in service of agricultural and social development. [5,7,9]

The importance of studying leadership behavior in rural communities is further amplified by the limited number of agricultural extension agents, the vast agricultural land area, the diversity of productive activities, and the varying needs of farmers - conditions that render local leaders a supportive human resource for broadening the reach of extension work. However, the success of this role is influenced by a number of personal, social, and professional variables that may either enhance or constrain leadership behavior effectiveness, which necessitates its analytical examination to reveal its general level, principal dimensions, and the nature of its variation according to those variables. [2, 8, 10]

Despite the acknowledged importance of rural leadership in supporting local development, domestic studies addressing the leadership behavior of rural leaders remain limited, particularly those that sought to measure the level of

such behavior across its various domains, examine the interrelationships among these domains, and analyze the differences therein according to specific personal, social, and professional variables. Furthermore, prior studies that addressed local leadership or leadership behavior patterns in rural environments - including Al-Douri (2010), Abd Al-Mu'ti (2016), Al-Za'bi (2018), and Ali and Hassan (2019) - have provided important indicators regarding the influence of education, experience, and community participation; however, the need remains to investigate this subject within the rural environment of Baiji District / Salah al-Din Governorate as a local context possessing its own distinct social and productive characteristics.[1,3,4]

Proceeding from the foregoing, the research problem is defined in terms of the need to diagnose the level of leadership behavior among rural local leaders in Baiji District / Salah al-Din Governorate, and to analyze this behavior across its domains, namely: general human and social relations, boldness in work and decision-making, administrative leadership, and guidance and counseling. The study further aims to reveal the nature of the correlational relationships among these domains, to identify differences in leadership behavior according to selected independent variables - namely: age, educational level, duration of rural leadership

role practice, place of work, degree of conviction in the leadership role, readiness for change, and attitude toward local leadership work. In doing so, the study seeks to provide a scientific basis that can be utilized in the development of extension and training programs directed at rural local leaders, with a view to enhancing the effectiveness of their roles in serving the local agricultural community. [10,11]

Material and Methods

This study was conducted in Baiji District, Salah al-Din Governorate in Iraq, as it represents a rural agricultural environment encompassing diverse types of local leadership, including tribal sheikhs, village headmen (mukhtars), agricultural extension agents, and members of farmers' associations, rendering it an appropriate field for investigating the leadership behavior of rural local leaders. The study population comprised 333 rural local leaders, from whom a proportional random sample of 100 respondents was selected. A structured questionnaire was employed as the primary data collection instrument, consisting of two parts: the first was designated for collecting data

pertaining to the personal and social characteristics of the respondents, while the second was designed to measure leadership behavior across four domains, namely: general human and social relations, boldness in work and decision-making, administrative leadership, and guidance and counseling. The reliability of the instrument was verified using Cronbach's alpha coefficient, which yielded a value of 0.86, while the validity coefficient was 0.927. Data were analyzed statistically using IBM SPSS Statistics software.

Results and Discussion

Objective 1: Assessment of the General Level of Leadership Behavior Among Rural Local Leaders in Baiji District / Salah al-Din Governorate

The results revealed that the leadership behavior scores of the respondents ranged from a minimum of 202 to a maximum of 249, with an arithmetic mean of 232.09 and a standard deviation of 9.52. For the purpose of determining the general level of leadership behavior, respondents were classified into three categories based on the range, as illustrated in Table 1.

Table 1. Distribution of Respondents across Three Categories According to Overall Leadership Behavior Level

Mean	%	Frequency	Category	No.
209.57	7	7	Low (202–217)	1
227.02	41	41	Moderate (218–233)	2
239.12	52	52	High (234 and above)	3
SD = 9.52	100	100	Total	

As indicated by the data presented in Table 1, more than half of the respondents (52%) fell within the high leadership behavior category, followed by the moderate category at 41%, while the proportion of respondents in the low category did not exceed 7%. This finding suggests that the overall level of leadership behavior among rural local leaders in the study area tends toward the high end of the scale, reflecting the fact that a substantial proportion of them possess an adequate level of leadership characteristics and behavioral patterns that enable them to fulfill their roles within the rural community with relative efficiency.

This finding may be interpreted in light of the social and organizational roles undertaken by rural local leaders, as their positions necessitate direct and continuous interaction with members of the local community, thereby contributing to the development of their capacities in communication, influence, coordination of efforts, and engagement with diverse situations.

Furthermore, this elevated level may be associated with the field experience and accumulated social knowledge possessed by the respondents, which has reinforced their capacity to exercise their leadership roles in the domains of guidance, decision-making, and relationship management within the rural environment. It is also plausible that the extension experiences and practical engagements encountered by some respondents have contributed to enhancing their leadership behavior and elevating their effectiveness in directing followers and achieving local objectives. The high overall level of leadership behavior indicates that rural local leaders demonstrated an adequate level of performance across the constituent dimensions of this behavior — namely, general human and social relations, boldness in work and decision-making, administrative leadership, and guidance and counseling — the detailed findings of which will be presented under the subsequent objective.

This finding affirms that rural local leaders represent an important human resource that can be leveraged in support of extension and developmental activities, particularly in rural environments that require the presence of local figures capable of influencing others and facilitating the transfer of appropriate ideas and practices to community members.

Objective 2: Examination of the Significance of Correlational Relationships Among the Domains of Leadership Behavior

The results of the correlation matrix revealed the existence of positive

and statistically significant correlational relationships among all four domains of leadership behavior, namely: general human and social relations, boldness in work and decision-making, administrative leadership, and guidance and counseling, as illustrated in Table 2. This indicates that the domains of leadership behavior do not operate independently; rather, they are interrelated within an integrated behavioral structure that reflects the nature of the leadership performance of rural local leaders.

Table 2. Correlation Matrix Among the Domains of Leadership Behavior

Guidance&Counseling	Administrative Leadership	Boldness in Work&Decision-Making	General Human&Social Relations	Domain
0.260	0.263	0.220	1	General Human&Social Relations
0.292	0.410	1	0.220**	Boldness in Work&Decision-Making
0.506	1	0.410**	0.263**	Administrative Leadership
1	0.506**	0.292**	0.260**	Guidance&Counseling

*Note: ** denotes a statistically significant correlation at the probability level of $p \leq 0.01$.*

The data presented in Table 2 demonstrate the presence of positive and statistically significant

correlational relationships among all domains of leadership behavior, indicating that these domains are interrelated in actual practice and that the development of any one domain is associated with the development of the remaining domains. A significant correlation was observed between the domain of general human and social relations and each of the following domains: boldness in work and decision-making, administrative leadership, and guidance and counseling, suggesting that a leader's capacity to build positive relationships with others is associated with higher proficiency across other leadership dimensions.

The results further revealed a statistically significant correlation between the domain of boldness in work and decision-making and both administrative leadership and guidance and counseling, reflecting that leadership boldness does not constitute an isolated trait; rather, it is associated with the leader's capacity to manage situations, organize work, and direct individuals more effectively. Additionally, the results indicated that the highest correlation value was recorded between the domain of administrative leadership and the domain of guidance and counseling, with a correlation coefficient of 0.506 — a positive relationship of moderate strength — suggesting that leaders with higher administrative competence tend to demonstrate

greater capacity for directing and counseling individuals, and vice versa.

These findings affirm the integrative nature of leadership behavior among rural local leaders, in that leadership behavior is not manifested in a single dimension but is instead composed of a set of interrelated dimensions that mutually reinforce one another. A leader's success in establishing sound human and social relationships is likely to support their capacity for appropriate decision-making, while the possession of administrative leadership skills contributes to enhanced proficiency in guidance and counseling, thereby strengthening overall effectiveness in fulfilling leadership roles within the rural community. This finding carries significant applied implications for the fields of agricultural extension and rural development, as it indicates that the development of any single domain of leadership behavior may positively influence the remaining domains — a consideration that should be taken into account when designing training and capacity-building programs directed at rural local leaders.

Objective 3: Examination of Differences in Leadership Behavior According to the Independent Variables of the Respondents

1- The Age Variable

The results revealed that the ages of the respondents ranged from a minimum of 33 years to a maximum of 62 years, with an arithmetic mean of 48.56 years and a standard deviation of 6.57. For the purpose of

describing the distribution of respondents according to the age variable, they were classified into three age categories based on the range, as illustrated in Table 3.

Table 3. Distribution of Respondents According to Age Category

Mean	%	Frequency	Category	No.
230.87	32	32	Younger (33–42)	1
231.56	46	46	Middle-aged (43–52)	2
230.67	22	22	Older (53 and above)	3
SD = 6.57	100	100	Total	

As indicated by the data presented in Table 3, the middle-aged category ranked first with a proportion of 46%, followed by the younger category at 32%, and the older category at 22%. The results further show that the leadership behavior means across the three age categories were relatively comparable: the mean leadership behavior score for the younger category was 230.87, for the middle-

aged category 231.56, and for the older category 230.67, which preliminarily suggests limited variability in the level of leadership behavior according to the age variable. Figure 1 corroborates this convergence among the age category means, as the differences between them appeared descriptively minimal, thereby reinforcing the general trend of the subsequent statistical findings.

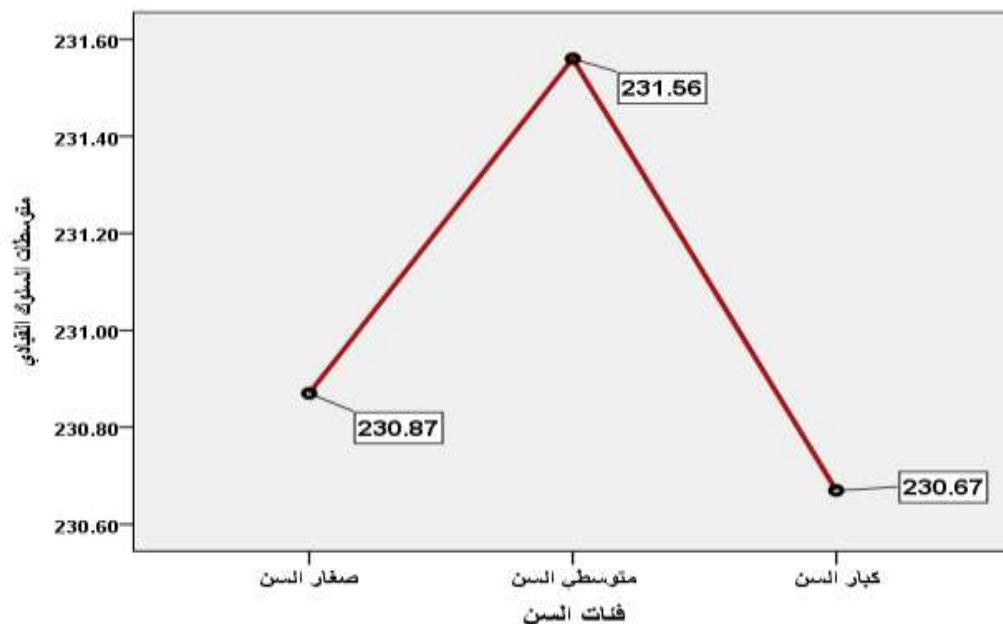


Figure 1. Age Categories According to the Leadership Behavior Means of the Respondents.

To verify the significance of differences among the leadership behavior means according to age

categories, a one-way analysis of variance (One-Way ANOVA) was applied, as presented in Table 4.

Table 4. Results of the One-Way ANOVA Test for Differences Among Leadership Behavior Means of the Respondents

P-Value	F~cal~	Mean Squares	df	Sum Squares	Source of Variance
0.084	0.311	28.660	2	57.320	Between Groups
		91.991	97	8923.158	Within Groups
			99	8984.190	Total

No statistically significant difference was detected.

The results presented in Table 4 indicate the absence of statistically significant differences in leadership behavior among the respondents according to the age variable, as the probability value ($p = 0.084$) exceeded the adopted significance level of 0.05.

Accordingly, the null hypothesis stating that there are no statistically significant differences among the leadership behavior means of the respondents according to their age categories is accepted.

This finding may be interpreted by recognizing that the exercise of leadership behavior among rural local leaders is not determined by chronological age alone; rather, it is influenced by a set of interrelated factors, including field experience, the nature of the social role, the position occupied by the leader within the local community, and the level of engagement with rural community issues. Furthermore, the convergence of the responsibilities and roles performed

Conclusion

In light of the findings yielded by the present study, the following conclusions may be drawn:

1. The study demonstrated that the overall level of leadership behavior among rural local leaders in Baiji District / Salah al-Din Governorate was high, indicating that the majority of respondents possess an adequate level of leadership behavior that qualifies them to fulfill their social, extension, and administrative roles within the rural community.
2. The results revealed the existence of positive and statistically significant correlational relationships among all four domains of leadership behavior — namely, general human and social relations, boldness in work and decision-making, administrative leadership, and guidance and counseling — thereby confirming the integrative character of these domains.
3. The study identified statistically significant differences in the level of leadership behavior according to certain independent variables, suggesting that leadership behavior is influenced by a number of personal, social, and professional characteristics of the respondents.
4. The variables of educational level, degree of conviction in the leadership role, readiness for change, and attitude toward local leadership work were found to constitute influential factors in the variability of leadership behavior levels among the respondents.
5. The findings affirm that the development of leadership behavior among rural local leaders necessitates the reinforcement of cognitive, attitudinal, and behavioral dimensions, and cannot be reduced to social standing alone.

5. RECOMMENDATIONS

In light of the study findings, the following recommendations are proposed:

- 1- The high overall level of leadership behavior recorded among rural local leaders in the study area should be recognized and built upon as a foundation for future extension and developmental programming.
- 2- Given the positive and statistically significant correlational relationships identified among the four domains of leadership behavior — reflecting their integration in leadership practice — training programs should adopt a holistic approach that simultaneously addresses all domains rather than targeting individual dimensions in isolation.
- 3- In view of the statistically significant variability in leadership behavior according to certain independent variables, differentiated and needs-based interventions should be designed to account for the diverse characteristics of rural local leaders.
- 4- Since educational level, conviction in the leadership role, readiness for change, and attitude toward local leadership work were found to be influential factors in this variability, targeted programs should prioritize raising educational attainment, fostering positive leadership attitudes, and cultivating openness to change among rural local leaders.
- 5- In recognition of the importance of cognitive, attitudinal, and behavioral development in enhancing leadership behavior, agricultural extension agencies and rural development authorities are encouraged to design and implement comprehensive capacity-building programs that address these three dimensions in an integrated and sustained manner.

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