



RESEARCH ARTICLE

Farming Anxiety as a Predictor of Farmer's Intention in the Era of Farming Insecurities

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Abstract

Over the years, Nigeria and other African countries have witnessed an increasing rate of insecurities that cuts across all aspects of society. The growing trend of farmer-herdsmen conflict, banditry, and kidnapping that characterizes the contemporary farming sector is undoubtedly affecting the socio-economic growth and food production in the country. There is a growing concern about farmers' motivation and willingness to access their farmlands in this era of constant insecurity. The present study aimed to examine farming anxiety as a psychological construct that could account for the variation in farming intention among the farmers. The study was conducted in the middle-belt region of Nigeria, and four hundred and thirteen farmers drawn from some volatile communities in Benue, Kogi, and Nasarawa state participated in the study. The respondents completed self-report measures of farming anxiety and intention. The regression analysis performed on the data revealed a positive interaction between the independent and dependent variables. Thus, the study concluded that farming anxiety is a significant predictor of farming intention.

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Introduction:-

Although Nigeria is heavily dependent on the oil industry for its budgetary revenues (Oluduro & Durojaye, 2013; Osah & Goodnews, 2016; Oseni, 2013), it is predominantly still an agrarian society (Tersoo, 2012). More than half of Nigeria's workforce is farming (Enyiaz & Nwangwu, 2019), primarily for subsistence and commercial levels. The sector provides food for the country's increasing population, employment opportunities, and foreign exchange earnings (Abubakar et al., 2018). Perhaps, it accounts for a significant percentage of Nigeria's total gross domestic product (GDP) (Mgbenka et al., 2015). The enormous agricultural resource base in the country provides a boundless potential for the economy's growth (Ogwumike & Akinnibosun, 2013). Thus, the nation has many foods and agricultural resources (Karya & Otsanjugu, 2019). More so, the abundant cash crops such as cocoa, citrus, cotton, groundnuts (peanuts), palm oil, palm kernel, and rubber have been Nigeria's major export crops over the years (Ajayi et al., 2010; Ayorinde et al., 2015). The country was practically self-sufficient in food production and carved an excellent position as a significant exporter of numerous cash crops (Nwozor et al., 2019).

However, as agriculture is currently in a decline position (Eze & Chinedu-Eze, 2016; Okoro et al., 2016), hence, leading to increased food insecurity and food dependency with the attendant massive importation aimed to bridge food gaps. Although, the government makes a significant effort to reposition the agricultural sector to boost its production capacity and make it competitive (Sabo et al., 2017). Unfortunately, the country's sustained security challenges pose a significant challenge to the sector, affecting farmers' productivity and ability to invest in their

farms. Typically, food production in Nigeria is dependent on natural environmental resources like rainfall, temperature, and relative humidity (Idumah et al., 2016). However, in recent times, the production of food is now primarily dependent on the security situation. The country is bedeviled with growing insecurity, which is inextricably linked to a reduction in farming.

The concept of farming insecurity entails the growing scale and persistence of insecurities on farmers and farming communities, such as the suspected herdsmen attacks, banditry, kidnapping, and other attacks. These crises constitute a critical problem to the farming population and generally affect the country negatively. Many farmers in rural communities across the country's different regions have been deprived of access to their farmlands for fear of being kidnapped for ransom or being attacked or killed by herders (Abdulkareem, 2021). The growing series of farmer-herdsmen clashes in various parts of the country have led to multiple destructions of lives and crops on farmlands (Somtochukwu et al., 2018). In most cases, farming communities have been forced to abandon their farmlands and agricultural products in response to aggression from attackers (Anthony et al., 2020).

Numerous authors have examined the prevalence and pattern of the continued attack on farmers across the country (see, Enor et al., 2019; George et al., 2021; Hamman & Haruna, 2018; Li, 2019; Kolawole et al., 2018; Mojisola, 2019; Oghuvbu & Oghuvbu, 2020; Olu-Adeyemi, 2017). Farming is the primary basis of agricultural activities and is currently less attractive due to the fear occasioned by various insecurities. Farming intention denotes the determination, attitudes, and overall enthusiasm to engage in farming activities. Consequently, rather than such intention, many Nigerian farmers are now taking breaks hoping that the security situation may improve. The experience of economic loss and its prospect impose material hardship on the farming communities. The present financial problem in the country has caused farmers in the deserted farmlands to struggle to make ends meet. Unfortunately, the government's effort to alleviate poverty in Nigeria through agriculture appears ineffective due to the rising insecurities in farmland (Omodero, 2021). Thus, creating heightened anxiousness among the farmers.

Anxiety refers to intense, excessive, and persistent worry and fear about situations perceived as dangerous. Often conceptualized as a state of heightened distress, arousal, and vigilance triggered by potential threat (Grupe & Nitschke, 2013; Hur et al., 2019). It is occasioned by fast heart rate, rapid breathing, sweating, and feeling of tiredness. The construct of farming anxiety is operationalized as the farmer's fear and worries attributed to being attacked on the farm. (Greig et al., 2020) contends accident rates and other variables have significantly affected the farmer's anxiety and stress. The rise in attacks on farmers has undoubtedly affected the farmer's psychological well-being and has triggered anxieties among the farmers. Consistent with this assertion, previous research indicates a higher anxiety level among farmers than in other occupations (Rudolphi et al., 2020; Sanne et al., 2004; Torske et al., 2016). While farmers in rural and remote communities encounter everyday chaos, they nevertheless have their series of psychological challenges and stressors, predominately involving increased anxiety and depressive symptoms due to the increased uncertainty of violent attacks.

In this period of rising insecurities, the intention to work on the farm may be dampened by severe anxiousness with effects on family's lives, relationships, productivity, and overall physical and mental well-being. Researchers have examined various factors influencing farming intention in different agricultural domains (Caffaro et al., 2020; Haden et al., 2012; Kahramanoglu et al., 2020; Nguyen et al., 2021; Raza et al., 2019; Tama et al., 2021; Wang et al., 2019). For example, farmer's education (Cao et al., 2020), perceived risk (Han & Li, 2020), attitudes, and social norms (Rezaei et al., 2018) have been found to determine farmer's intention. However, the role of perceived insecurities in the farm and its effect on farming intention is scarce in the literature, thus justifying the present study.

Nevertheless, insinuations suggest that the middle-belt region of Nigeria is well known for farming. Perhaps, the primary source of income among the people is farming, and the people spend most of their time on the farm. However, the increasingly violent attacks on farmers have led to a massive decline in food production (Clement, 2014; Mbah et al., 2019; Olawole et al., 2018; Olayiwola, 2019). States like Benue, Taraba, Nasarawa, Plateau, Kaduna, Katsina have been reportedly overwhelmed by numerous attacks on the farm. (Anthony et al., 2020). The perceived food insecurity could be attributed to farmer's inability to access their farmlands. Although this situation is prevalent across the country, this study is focused on the middle-belt state because of the observed motivational decline among farmers. Thus, this study's primary purpose is to explore farmers' intention to attend to their farms in this period of heightened insecurities.

Hypothesis

Given the purpose of the study, a specific hypothesis was formulated to guide the study:
Farming anxiety will significantly predict farming intention

Method:-

The present study was conducted in the Benue, Kogi, and Nasarawa state of Nigeria. The study population consisted of farmers from the rural farming communities of the selected states, namely Agatu, Gboko, Katsina ala in Benue state, Ibaji, Ofu in Kogi state, and Doma, Keana in Nasarawa state. The selected study parameters are considered volatile in relation to the farming crisis. Males and females who engage in farming activities for livelihood were chosen as the study participants using a simple random sampling method. Four hundred and sixty-seven farmers were approached between July and September 2021 and were asked to participate in the study. They were briefed on the purpose of the study and were also informed that participation in the survey was solely voluntary, and they could withdraw any time they wanted. In all, 444 farmers consented to partake in the study and were given the instrument of the study. Four hundred and forty-four questionnaires were distributed and retrieved on the spot, and perhaps, the respondents were equally interviewed. However, 31 copies of the questionnaire were wrongly filled. Thus, they were discarded. The 413 correctly filled questionnaires were subjected to statistical analysis. Perhaps, the size exceeded the minimum required sample size for research when the total population is up to fifty thousand (Robert & Daryle, 1970).

Instrument

The farming intention was measured with a scale designed to assess the respondent's motivation and eagerness to continue working on the farm in the time of uncertainty. The scale consists of 15 items rated on a 5-point Likert-type scale (1 = Never, 5 = Always). A higher score on this scale indicates a high intention. The instrument was validated following a pilot study, and 0.78 Cronbach's alpha was obtained.

Farming anxiety was measured using an anxiety scale adapted from the Self-Rated Anxiety Sub-scale originally developed by Warr et al. (1979) as a tool of measuring the internal psychological states of the workers regarding the concerning or worrying circumstances in work indicating self-rated anxiety level. The scale comprised 7- items scored in a five-point rating scale, ranging from 1 (not at all concerned) to 5 (extremely concerned). The total score of the instrument ranged from 7 to 35. In contrast, a score of 7-14 indicates low Self-Rated Anxiety, while a score of 15-24 represents moderate Self-Rated Anxiety and 25-35 points indicate high Self-Rated Anxiety. The items were modified to suit the current samples. A Cronbach alpha 0.86 was recorded on the scale following a reliability test.

Result:-

The study assumed that farming anxiety would significantly predict farmers' intention to work on their farms regarding the looming insecurities in the country. Thus, a linear regression model was conducted to test this hypothesis. The result of the linear regression established a statistically significant effect of farming anxiety on the respondent's intention to work in the farm $F(1,411), 124.617 P < .05$ with adjusted R^2 of 483.

Table 1:- Table showing the result of the linear regression analysis of the effect of farming anxiety on farming intention.

	B	SEB	β	t	R^2	Sig
Constant	1.85	.047		38.77	.483	.000
Farming Anxiety	-.69	.062	-.69	-11.17	.000	

Note: B = Unstandardized regression coefficient; CI = Confident Interval; LL = Lower Limit; UL = Upper Limit; SEB = Standardized error of the coefficient; β = Standardized coefficient; R^2 = Coefficient of determination.
* $P < .000$.

Discussion:-

The present study was conducted to examine the farming intention based on farming anxiety. The study assumed that farmers' anxiety occasioned by the constant attacks on farmers would influence their intention to work on their farms. A simple regression analysis was performed on the data. The result revealed that farming anxiety positively predicted farming intention. The adjusted R^2 indicates that farming anxiety contributed 48.3% of the variation in farming intention among the respondents. The current research findings mean that even when the farmers are

motivated to continue their everyday farming activities, a certain level of nervousness interferes with their intention to return to work. Similarly, Greig et al. (2020) noted that anxiety and stress significantly affect many farmers and their families. We can infer from the current finding that many farmers within the volatile communities effectively avoid the increasing chaos surrounding farm work. They nevertheless experience a series of psychological challenges and stressors, predominately involving increased anxiety due to the increased uncertainty of the current era.

Conclusion:-

The present research was aimed to explore farming anxiety as a psychological concept that could predict farming intention among farmers in volatile communities. The regression analysis performed on the data supports the independent variable in predicting the farming intention of farmers. The research result provides insight into the psychological state of the farmer during this era of farming insecurities in Nigeria. Thus, the study concludes that the heightened concern regarding the increasing rate of attacks on the farm negatively impacts the farmers' mental health. In other words, the result established a positive interaction between farming anxiety and farming intention. Consequently, the causative factors in this relationship remain unclear. Despite this limitation, the present study contributes to the agricultural literature by revealing farming anxiety as a potential contributor to the looming food insecurities in Nigeria. Also, the study broadens our understanding of the psychological position of farmers in this troubling time and its implication in food production. Perhaps, the findings provided crucial data that could be capable of improving farming morale and motivation. Therefore, it is recommended that psychologists and counselors be included in the fight against insecurities in farming communities in the country. This is because anxiety-related issues in farmers are mostly left unacknowledged and untreated and reflect in mental health and low productivity.

References:-

1. Abdulkareem, M. (2021). Abuja farmers lament the impact of insecurity, herders' attacks. <https://www.premiumtimesng.com/news/more-news/475895-abuja-farmers-lament-impact-of-insecurity-herders-attacks.html>
2. Abubakar, A.-M. J., Abubakar, S. S., Ibrahim, M. S., & Kolo, A. (2018). Agriculture and Poverty Reduction in Nigeria; A Review. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 23(2).
3. Ajayi, I. R., Ololade, I. A., Gbadamosi, E. A., Mohammed, M. Z., & Sunday, A. G. (2010). A Study on Effects of Soil Physico-Chemical Properties on Cocoa Production in Ondo State. *Modern Applied Science*, 4(5). <https://doi.org/10.5539/mas.v4n5p35>
4. Anthony, E., Daniel, A., & Promise, O. E. (2020). Farmers/Herdsmen Crisis and Sustainable Food Production in Nigeria. *The International Journal of Humanities & Social Studies*, 8(4). <https://doi.org/10.24940/theijhss/2020/v8/i4/hs2004-045>
5. Ayorinde, K., Lawal, R. M., & Muibi, K. (2015). Land Suitability Assessment for Cocoa Cultivation in Ife Central Local Government Area, Osun State. *International Journal of Scientific Engineering and Research*, 3(4).
6. Caffaro, F., Micheletti Cremasco, M., Roccato, M., & Cavallo, E. (2020). Drivers of farmers' intention to adopt technological innovations in Italy: The role of information sources, perceived usefulness, and perceived ease of use. *Journal of Rural Studies*, 76. <https://doi.org/10.1016/j.jrurstud.2020.04.028>
7. Cao, W., Zhou, S., Wu, S., & Song, C. (2020). Factors influencing farmers' intentions for urban-rural harmony in metropolitan fringes and regional differences therein. *Papers in Regional Science*, 99(1). <https://doi.org/10.1111/pirs.12477>
8. Clement, C. (2014). Assessment of Food Security Status among Rural Farming Households in Guma Local Government Area of Benue State, Nigeria. *International Journal of Research in Humanities and Social Studies*, 1(2).
9. Enor, F. N., Magor, S. E., & Ekpo, C. E. (2019). Contending perspectives and security implications of herdsmen activities in Nigeria. *International Journal of Research -GRANTHAALAYAH*, 7(7). <https://doi.org/10.29121/granthaalayah.v7.i7.2019.765>
10. Eze, S. C., & Chinedu-Eze, V. (2016). Agripreneurship Curriculum Development in Nigerian Higher Institutions. *International Journal of Small Business and Entrepreneurship Research*, 4(6). <https://doi.org/10.37745/ejsber.vol4.no6.p53-66.2016>
11. George, J., Adelaja, A., Awokuse, T., & Vaughan, O. (2021). Terrorist attacks, land resource competition and violent farmer-herder conflicts. *Land Use Policy*, 102. <https://doi.org/10.1016/j.landusepol.2020.105241>

12. Greig, B., Nuthall, P., & Old, K. (2020). An Analysis of Farmers' Human Characteristics as Drivers of Their Anxiety. In *Journal of Agromedicine* (Vol. 25, Issue 1). <https://doi.org/10.1080/1059924X.2019.1656692>
13. Grupe, D. W., & Nitschke, J. B. (2013). Uncertainty and anticipation in anxiety: An integrated neurobiological and psychological perspective. In *Nature Reviews Neuroscience* (Vol. 14, Issue 7). <https://doi.org/10.1038/nrn3524>
14. Haden, V. R., Niles, M. T., Lubell, M., Perlman, J., & Jackson, L. E. (2012). Global and Local Concerns: What Attitudes and Beliefs Motivate Farmers to Mitigate and Adapt to Climate Change? *PLoS ONE*, 7(12). <https://doi.org/10.1371/journal.pone.0052882>
15. Hamman, J. A., & Haruna, A. (2018). The role of group solidarity in the conflict between farmers and Fulani pastoralists: A case study of Northern Nigeria. *African Journal of Political Science and International Relations*, 12(3). <https://doi.org/10.5897/ajpsir2017.1068>
16. Han, F., & Li, B. (2020). A new driver of farmers' entrepreneurial intention: Findings from e-commerce poverty alleviation. *World Review of Entrepreneurship, Management, and Sustainable Development*, 16(1). <https://doi.org/10.1504/WREMSD.2020.105512>
17. Hur, J., Stockbridge, M. D., Fox, A. S., & Shackman, A. J. (2019). Dispositional negativity, cognition, and anxiety disorders: An integrative translational neuroscience framework. In *Progress in Brain Research* (Vol. 247). <https://doi.org/10.1016/bs.pbr.2019.03.012>
18. Idumah, F. O., Mangodo, C., Ighodaro, U. B., & Owombo, P. T. (2016). Climate Change and Food Production in Nigeria: Implication for Food Security in Nigeria. *Journal of Agricultural Science*, 8(2). <https://doi.org/10.5539/jas.v8n2p74>
19. Kahramanoglu, I., Usanmaz, S., & Alas, T. (2020). Reasons behind the farmers' behavior about the implementation of sustainable farming practices. *Journal of Sociology and Social Anthropology*, 11(1–3). <https://doi.org/10.31901/24566764.2020/11.1-3.344>
20. Karya Kate Nanbol, & Otsanjugu Aku Timothy Namo. (2019). The Contribution of Root and Tuber Crops to Food Security: A Review. *Journal of Agricultural Science and Technology B*, 9(4). <https://doi.org/10.17265/2161-6264/2019.04.001>
21. Li, N. (2019). Nigeria's Fulani Herdsmen-Farmers Conflict and Peace Building. *Journal of Environmental Science and Public Health*, 03(01). <https://doi.org/10.26502/jesph.96120049>
22. M. Kolawole, A., Amoge, H., & Eunice, A. (2018). Assessment of the Effect of Farmers-Herdsmen Conflicts on National Integration in Nigeria. *International Journal of Humanities and Social Science*, 8(10). <https://doi.org/10.30845/ijhss.v8n10p13>
23. Mbah, E. N., Attah, A. J., & Jiriko, R. (2019). Urban Agriculture among Households of Makurdi Metropolis of Benue State, Nigeria: Key Challenges. *Asian Journal of Advances in Agricultural Research*. <https://doi.org/10.9734/ajaar/2019/v10i330033>
24. Mgbenka, R. N., Mbah, E. N., & Ezeano, C. I. (2015). A Review of Smallholder Farming in Nigeria: Need for Transformation. *Agricultural Engineering Research Journal*, 5(2).
25. Mojisola, A. O. (2019). Herdsmen-Farmers Crisis and its Implication on Human Resource Management: The Nigeria Experience. *International Journal of Academic Research in Business and Social Sciences*, 9(10). <https://doi.org/10.6007/ijarbss/v9-i10/6458>
26. Nguyen, T. P. L., Doan, X. H., Nguyen, T. T., & Nguyen, T. M. (2021). Factors affecting Vietnamese farmers' intention toward organic agricultural production. *International Journal of Social Economics*, 48(8). <https://doi.org/10.1108/IJSE-08-2020-0554>
27. Nwozor, A., Olanrewaju, J. S., & Ake, M. B. (2019). National insecurity and the challenges of food security in Nigeria. *Academic Journal of Interdisciplinary Studies*, 8(4). <https://doi.org/10.36941/ajis-2019-0032>
28. Oghuvbu, E. A., & Oghuvbu, O. B. (2020). Farmers-Herdsmen Conflict in Africa: The Case of Nigeria. *Vestnik RUDN. International Relations*, 20(4). <https://doi.org/10.22363/2313-0660-2020-20-4-698-706>
29. Ogwumike, F. O., & Akinnibosun, M. K. (2013). Determinants of poverty among farming households in Nigeria. *Mediterranean Journal of Social Sciences*, 4(2). <https://doi.org/10.5901/mjss.2013.v4n2p365>
30. Okoro, U. S., Omonona, B. T., & Ibok, O. W. (2016). Determinants of Technical Efficiency in Irrigated Ornamental Plants Production System of Akwa Ibom State, Nigeria. *ISSN*, 7(15).
31. Olawole, O. C., Monday, O. S., Babatunde, O., & Olawole, O. C. (2018). The Political Economy of Fulani Herdsmen Activities and Inter-Ethno-Religious Relations in Nigeria's Fourth Republic: Issues and Prospects. *Saudi Journal of Humanities and Social Sciences (SJHSS)*, 6256(November).
32. Olayiwola, O. A. (2019). Nomadic terrorism, displacement, and food insecurity challenge in the food basket of the nation. In *Global Food Politics and Approaches to Sustainable Consumption: Emerging Research and Opportunities*. <https://doi.org/10.4018/978-1-7998-0125-2.ch005>

33. Olu-Adeyemi, L. (2017). Deprivation, Frustration, and Aggression: An interrogation of Fulani Herdsmen Terror in Nigeria. *Advances in Social Sciences Research Journal*, 4(15). <https://doi.org/10.14738/assrj.415.3501>
34. Oluduro, O., & Durojaye, E. (2013). The implications of oil pollution for the enjoyment of sexual and reproductive rights of women in the Niger Delta area of Nigeria. *International Journal of Human Rights*, 17(7–8). <https://doi.org/10.1080/13642987.2013.835911>
35. Omodero, C. O. (2021). Sustainable agriculture, food production, and poverty is lessening in Nigeria. *International Journal of Sustainable Development and Planning*, 16(1). <https://doi.org/10.18280/ijstdp.160108>
36. Osah, & Goodnews. (2016). Politics of amnesty and conflict management in Nigeria's Niger Delta. *Journal of Research and Development*, 1(3).
37. Oseni, M. (2013). Internally Generated Revenue \IGR\ in Nigeria: A Panacea for State Development. *European Journal of Humanities and Social Sciences*, 21(1).
38. Raza, M. H., Abid, M., Yan, T., Ali Naqvi, S. A., Akhtar, S., & Faisal, M. (2019). Understanding farmers' intentions to adopt sustainable crop residue management practices: A structural equation modeling approach. *Journal of Cleaner Production*, 227. <https://doi.org/10.1016/j.jclepro.2019.04.244>
39. Rezaei, R., Mianaji, S., & Ganjloo, A. (2018). Factors affecting farmers' intention to engage in on-farm food safety practices in Iran: Extending the theory of planned behavior. *Journal of Rural Studies*, 60, 152–166. <https://doi.org/10.1016/J.JRURSTUD.2018.04.005>
40. Robert, K., & Daryle, M. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30.
41. Rudolphi, J. M., Berg, R. L., & Parsaik, A. (2020). Depression, Anxiety, and Stress Among Young Farmers and Ranchers: A Pilot Study. *Community Mental Health Journal*, 56(1). <https://doi.org/10.1007/s10597-019-00480-y>
42. Sabo, Isah, S. D., Chamo, A. M., & Rabi, M. A. (2017). Role of Smallholder Farmers in Nigeria's Food Security. *Scholarly Journal of Agricultural Science*, 7(1).
43. Sanne, B., Mykletun, A., Moen, B. E., Dahl, A. A., & Tell, G. S. (2004). Farmers are at risk for anxiety and depression: The Hordaland Health Study. *Occupational Medicine*, 54(2). <https://doi.org/10.1093/occmed/kqh007>
44. Somtochukwu, V. O., Orekyeh, E. S. and, & Eze, U. O. (2018). Media Framing of Herdsmen-Farmers Conflict in Nigeria. *International Journal of Communication: An Interdisciplinary Journal of Communication Studies*, December.
45. Tama, R. A. Z., Ying, L., Yu, M., Hoque, M. M., Adnan, K. M., & Sarker, S. A. (2021). Assessing farmers' intention towards conservation agriculture by using the Extended Theory of Planned Behavior. *Journal of Environmental Management*, 280. <https://doi.org/10.1016/j.jenvman.2020.111654>
46. Tersoo, P. (2012). Agribusiness as a Veritable Tool for Rural Development in Nigeria. *International Letters of Social and Humanistic Sciences*, 14. <https://doi.org/10.18052/www.scipress.com/ilshs.14.26>
47. Torske, M. O., Hilt, B., Glasscock, D., Lundqvist, P., & Krokstad, S. (2016). Anxiety and Depression Symptoms Among Farmers: The HUNT Study, Norway. *Journal of Agromedicine*, 21(1). <https://doi.org/10.1080/1059924X.2015.1106375>
48. Wang, H., Li, C., Liu, J., & Zhang, S. (2019). Research on farmer's willingness of land transfer behavior based on food security. *Sustainability (Switzerland)*, 11(8). <https://doi.org/10.3390/su11082338>
49. Warr, P., Cook, J., & Wall, T. (1979). Scales for the measurement of some work attitudes and aspects of psychological well-being. *Journal of Occupational Psychology*, 52(2). <https://doi.org/10.1111/j.2044-8325.1979.tb00448.x>