

The Influence of Social Variation on English Language Learning in Nigerian Air Force Settings

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Abstract

This study investigates the influence of social variation on English language learning within the Nigerian Air Force (NAF), focusing on how social variables—such as class, gender, educational attainment, and duration of stay—affect language acquisition and communicative performance among military personnel and civilian staff. Drawing upon Basil Bernstein's Code Theory, the research explores the distinction between restricted and elaborated language codes in the hierarchical, regimented context of the Kaduna NAF Base. Employing a descriptive survey design, data were gathered from 200 participants through structured questionnaires. The responses were quantitatively analysed using tabular presentations and single-factor ANOVA tests to evaluate statistical significance across key social categories. The findings revealed that individuals of higher social status, particularly commissioned officers, demonstrated greater proficiency in Standard English, attributable to enhanced access to formal education and professional training. Duration of stay at military installations significantly impacted language development, with longer residency correlating with higher linguistic competence. Moreover, the quality of instructional personnel emerged as a vital determinant of language learning outcomes, especially for individuals engaged in structured educational programmes within the base. Gender-based disparities also surfaced, with societal biases favouring male linguistic competence, particularly in military contexts characterised by patriarchal structures and occupational role expectations. This study offers fresh perspectives in military sociolinguistic research by underscoring the implications of social hierarchy, institutional training, and cultural norms on language acquisition. It further advances scholarship in Code Theory by demonstrating how elaborated and restricted codes are unequally distributed among different strata within a controlled, professional community. The work advocates for equitable access to language instruction, gender-sensitive policy reforms, and the promotion of inclusive communicative practices within military settings. These insights are crucial for informing language policy in structured environments and improving overall communication efficiency among diverse occupational and social groups within the armed forces.

Keywords: Military Sociolinguistics, Language Acquisition, Social Stratification, Bernstein's Code Theory

Introduction

Language is a systemic means of communicating thoughts and ideas in all human communities and forms a part of the intangible culture of a social group (Evans & Levinson, 2009). As a system of communication consisting of elements like phonology, grammar, and semantics, language exists in the form of thousands of varieties and dialects (Kamusella, 2016). One of the ways by which sociologists and anthropologists have differentiated these linguistic forms is by the use of social variables such as class, occupation, gender, age, education, race, and so on (Gumperz & Cook-Gumperz, 2008). These variables exist in different forms and give rise to social dialects or sociolects, which are either acquired through natural, subconscious processes of immersion (language acquisition) or learned (by way of conscious, pedagogical processes) in formal settings. Language learning, in this paper, refers to the process by which an individual consciously takes up a language or gains proficiency in an existing language by acquiring language skills in reading, writing, listening, and speaking within a formal structure. In several areas where English serves as a second language, language learning acts as a tool for achieving proficiency through formal instruction in educational classes with structured curricula and exercises (Lightfoot, 2010). In the Nigerian context, language use is important in various establishments, particularly sectors like the Nigerian Air Force, where hierarchical power and authority are institutionalised and enforced; and in such areas, people use language to share information both within and outside the military setting.

The Nigerian Air Force (NAF) is one of the three branches of the military operating under Nigeria's Ministry of Defence (Nigerian Air Force, 2024). As stated by Zighadina (1997), it was formed in April 1964 through an Act of Parliament specifically created to serve as an aerial unit for supporting military peacekeeping efforts in places such as the Congo and Tanzania. Originally, the NAF collaborated with foreign air systems to transport troops and perform air operations; however, it has since evolved into a vital component of Nigeria's military capabilities, especially concerning military transportation, logistics, and counter-insurgency activities (Martin, 2012). The NAF has a complex organisational structure that is led by the Chief of Air Staff, who reports directly to the President of Nigeria. The NAF functions through a service headquarters (HQ NAF), key staff branches (overseen by officers of the rank of Air Vice-Marshal), and various operational commands located across seventeen strategically positioned bases in states like Abuja, Lagos, Kaduna, and Benin City, among others. The force consists of commissioned officers—ranging from Pilot Officers to the Marshal of the Nigerian Air Force—and non-commissioned personnel holding specific rank titles such as Airmen/Airwomen (also known as other ranks). Recruitment occurs periodically through three distinct programs: the Regular Combatant scheme, the Direct Short Service Commission, and the Basic Military Training Course, each with its own criteria for academics, physical fitness, and age (Zighadina, 1997; Martin, 2012). In addition to its military personnel, the NAF employs a substantial number of civilian support staff who bring essential skills in fields such as aviation, logistics, education, engineering, and medical services. These civilians, often employed on a contractual basis, collaborate with military professionals to ensure effective base operations.

The NAF bases offer a well-structured work-oriented environment that caters to both military personnel and civilian staff. Within these installations, commissioned officers and non-commissioned members perform specialised tasks ranging from piloting and surgery to legal services, education, and engineering, thereby ensuring the force achieves its operational and strategic objectives. Meanwhile, civilian support staff manage administrative duties, logistics, and maintenance tasks that enhance the technical and combat capabilities of the military. This combined approach between military and civilian personnel promotes efficient daily operations and improves the air force's overall effectiveness (Nigerian Air Force, 2024). Moreover, the living arrangements at NAF bases are designed to accommodate the diverse

ranks and responsibilities within the organisation. Commissioned officers reside in designated quarters that acknowledge their leadership roles, while non-commissioned members live in areas that foster teamwork and discipline. The civilian support staff also reside on the bases, allocated to specific areas such as California quarters and Ghanaian quarters. These housing arrangements are structured to maintain operational efficiency without disruption from ethnic, gender, or religious influences.

The English language serves as the official means of communication among personnel of the NAF (Hoyle, 2017) with its significance underscored by the prerequisite for potential recruits to obtain a credit in English before they can join the ranks (Nigerian Air Force, 2021). Nonetheless, in spite of the essential function of language in military communication and operational efficiency, there exists a limited comprehension of how social elements such as class, length of residency, educational background, and gender affect language acquisition and use in organised military settings like the NAF Base. This lack of insight undermines political and educational initiatives aimed at advancing language policy, recognising military jargon (militarese) as a valuable diatypic variety, promulgating fair linguistic proficiency, and facilitating effective communication among different groups (both military and civilian) within the base. Consequently, this research aims to explore the influence of social variation on language learning in a military division, specifically focusing on the Kaduna NAF Base. The Kaduna NAF Base was chosen for this study due to its significance as a centre for military training and education. The area's importance is reinforced by the presence of major institutions such as the Training Command, Nigerian Defence Academy (NDA), Air Force Institute of Technology (AFIT), the Armed Forces Command and Staff College at Jaji, and Nigerian Military School (NMS), and these military schools and institutions contribute to the region's role in influencing the professional growth of military personnel nationwide.

The research investigates how independent factors like social class, length of stay, educational level, and gender disparities affect language learning among residents at the Kaduna NAF Base. The following research questions have been formulated to direct this inquiry:

1. To what extent does social class influence language learning outcomes among residents of the Kaduna NAF Base?
2. How does duration of stay affect language variation and proficiency within the Kaduna NAF Base?
3. Is there a significant association between educational attainment and the acquisition of Standard English or military jargon among personnel in the Kaduna NAF Base?
4. Are there observable differences in language learning and usage between male and female residents of the Kaduna NAF Base?

The following null hypotheses were formulated to guide the study:

- $H_{0\ 1}$: There is no significant difference in language learning outcomes among social classes in the Kaduna NAF Base.
- $H_{0\ 2}$: There is no significant relationship between duration of stay and language proficiency in the Kaduna NAF Base.
- $H_{0\ 3}$: There is no significant association between educational attainment and the acquisition of Standard English or military jargon in the Kaduna NAF Base.
- $H_{0\ 4}$: There is no significant difference in language learning and usage between male and female residents of the Kaduna NAF Base.

The findings from the Single Factor ANOVA test, which evaluates the hypotheses, aim to identify notable differences in language learning outcomes in relation to the independent variables (social class, length of stay, educational level, and gender) within the Kaduna NAF Base. This exploration is vital because the study underscores the need for effective language policy planning and focused measures to foster equitable communication and operational effectiveness within the military institution.

Literature Review

This paper adopts Basil Bernstein's Code Theory as its preferred theoretical framework for exploring the influence of social variables on language learning within the NAF setting. Drawing from his background as an educator, Bernstein (2000) notes that Code Theory distinguishes between two forms of language codes—restricted and elaborated—each shaped by social structures and power relations (Barrett, 2024, p. 15). Restricted codes, which are rooted in closely shared identifications within intimate groups such as kinship ties or army combat units, rely on implicit meanings derived from shared norms and background experiences. In contrast, elaborated codes are more explicit, context-independent, and universalistic, requiring speakers to articulate their points fully. These codes are prevalent in environments such as academic or professional settings, where shared understandings cannot be assumed. Bernstein links these codes to primary socialisation and argues that family dynamics and occupational roles shape coding orientations (Moore, 2013). In Bernstein's view, working-class occupations, which often emphasise manual dexterity over linguistic negotiation, tend to foster restricted codes, while middle-class jobs encourage elaborated codes through participation and discussion. This distinction between restricted and elaborated codes extends beyond occupational scenarios into family authority modalities. For instance, positional authority (e.g., uttering the statement "because I am your father") reflects restricted codes, whereas personal authority (e.g., explaining decisions) aligns with elaborated codes (Barrett, 2024, p. 16).

In the context of a structured and hierarchical environment like the NAF, restricted and elaborated codes can be observed in communication patterns shaped by rank hierarchies, professional roles, and situational contexts. Restricted codes—which are implicit, context-dependent, and rely on shared understandings—are prevalent in situations where communication occurs among individuals with close-knit relationships or shared experiences. Such scenarios include rank-based communications during drills (e.g., "Quick March!"), the use of military jargon and symbols in spoken discourse and written correspondence (e.g., "AOC" for Air Officer Commanding), and routine tasks such as guard duty or maintenance checks, where instructions may be brief and context-specific. Elaborated codes, on the other hand, are explicit, context-independent, and accessible to a broader audience. These codes are used when communication needs to transcend soldier-soldier talk within social groups or when clarity is essential for diverse audiences. Examples include communication patterns in training manuals and written instructions, public statements and media engagement, cross-rank or inter-service communication involving personnel from different ranks or branches (e.g., Air Force with the Army, Navy, or international allies in joint operations), and policy statements such as legal and administrative documents.

Bernstein's Code Theory therefore provides a viable model for investigating how language codes are learned in formal and informal settings by soldiers and civilians. It explores how language codes (both formal and militarese) perpetuate social inequalities and influence learning outcomes within the structured environment of the Kaduna NAF Base. The theory also highlights how speakers—both soldiers and civilians—adapt their communicative patterns to meet the hierarchical and operational demands of this military setting.

Zhao et al. (2025) conducted a comparative systematic review of 30 studies from 2019 to 2023 to evaluate the effectiveness of Mobile-Assisted Language Learning (MALL) in enhancing oral English proficiency among higher education students. The study employed a mixed-methods approach using tests, questionnaires, and interviews to assess preferences and outcomes in both Chinese and global contexts. The work revealed similarities between Chinese and international studies, with minor differences in sample sizes and assessment methods in grading the speakers' performance in oral English studies. Doeden and Smidt (2024) used qualitative data collected over two time periods (2009–2013 and 2023) in order to explore some factors influencing the adoption of innovative English Language Teaching (ELT) strategies among rural Lao teachers. The study examined internal realities (e.g., self-efficacy, socio-economic standing) and external challenges (e.g., poverty and limited resources). The research highlighted the challenges that affect the teachers' responses to these realities and constraints, subsequently leading to the creation of an in-service training program to address learning difficulties in rural education.

The work by Alasgarova et al. (2024) employed a mixed-methods approach, including native language proficiency tests, e-surveys, focus group interviews, and thematic analysis, to study language attrition and cultural identity shifts among students in Azerbaijani international schools. Two groups were compared: those educated in English since preschool and those transitioning after primary school, with the findings contributing to the ongoing global discourse on language acquisition and learning. In another research by Adams and Nakano (2024), the focus was placed on the use of Sustainable Development Goals (SDGs) as a motivational tool in English education in Japan. A survey was conducted to examine the relationship between student interest in sustainability, International Posture (IP), and personal connections to SDGs. The study found that aligning English education with SDGs could promote student motivation and foster global citizenship, although practical implementation remains challenging due to the breadth of SDG topics.

Revell et al. (2024) analyse teacher questioning in Religious Education (RE) classrooms using Basil Bernstein's pedagogic device, particularly the concepts of classification and framing. Their methodology involves observing classroom discussions on science and religion in primary schools to assess how teachers manage epistemic boundaries. The study reveals that teachers employ both visible and invisible pedagogies, inadvertently limiting the diversity of ideas students engage with. This restricts pupils' ability to explore significant relationships between science and religion. Uwen and Mensah (2022) utilise theories of linguistic ideology and community of practice, supplemented by the concept of style-as-performance, to investigate the application of slang and jargon in the Nigerian Army. They gathered data through participant observation and semi-structured interviews with 30 individuals. The findings reveal that military slang promotes camaraderie, enforces discipline, and shapes professional identities, acting as a distinguishing factor for inclusion or exclusion within subcultures.

Shodieva (2024) offers a summary of sociolinguistic approaches, including variationist, interactional, and critical perspectives. Her theoretical framework integrates essential concepts such as language variation, social factors, and identity construction, highlighting the function of language in mirroring societal dynamics. The article examines the significance of sociolinguistic approaches in elucidating how language both reflects and influences social realities, although it remains predominantly theoretical without empirical exploration. Bamigbola (2022) uses Austin's Speech Act Theory, along with Searle's Indirect Speech Act and the Intention and Inference framework of Bach and Harnish, to examine both verbal and non-verbal communication during parades in the Nigerian Army. Data were obtained through participant observation and recordings. The study emphasises the importance of

context, shared beliefs, and non-verbal signals in military communication, demonstrating how authority is expressed through illocutionary acts.

This current study differentiates itself by employing Bernstein's Code Theory to assess how social variables influence language learning within the Kaduna NAF Base, whereas previous research often concentrates on isolated elements such as slang, pedagogy, politics, or social class. Furthermore, this research includes a wider array of variables, such as duration of residency and gender differences, thus providing a more thorough insight into language variation in organised military settings. Lastly, in contrast to previous studies that tend to be largely theoretical or contextually restricted, this research utilises empirical data and statistical techniques to deliver actionable insights into equitable language learning strategies within military environments.

Method

The design of this study employs the descriptive survey method, a form of quantitative research that involves gathering data to characterise, clarify, or investigate behaviours, attributes, or views within a specific population (Creswell & Creswell, 2023). This method was selected because it facilitates the collection and examination of data to reveal patterns and connections between the independent variables and the language learning questions. Data for this study were obtained through questionnaires distributed at the Kaduna NAF Base after the researcher received written consent from the Nigerian Air Force Headquarters (HQ NAF) to adhere to ethical practices, given that the NAF is a restricted setting. The questionnaire was chosen as the instrument for data collection as it offers structured responses, simplifying the quantification and systematic analysis of data (Creswell & Creswell, 2023, p. 46). The questionnaire comprised eighteen questions, but emphasis was placed on those questions that were most pertinent to the research goals, ensuring that the data gathered effectively contributed to addressing the research inquiries on language learning and social variables. To enhance reliability and validity, the researcher personally administered the questionnaires and collected them right after they were filled out in various sites at the Kaduna NAF Base.

Population and Sampling

The study's total population included 200 participants, made up of 23 Officers, 65 Airmen/Airwomen, and 112 Civilians. Participation was voluntary and the configuration of the population ensured adequate representation across all primary social categories within the Kaduna NAF Base. Random sampling, as described by Creswell and Creswell (2022), is a method where each member of the population has an equal opportunity to be chosen for participation in the research. In this study, random sampling was applied to guarantee that the sample reflected the various groups within the Kaduna NAF Base, consisting of Officers, Airmen/Airwomen, and Civilians. Participants were selected randomly from these categories to reduce bias and improve the generalisability of the results.

Analysis of Data

The data collected were analysed using two principal methods. First, the responses to the questionnaire were organised into tables summarising the subjects' perceptions based on four main parameters: social class, length of stay, educational level, and gender differences. Subsequently, a single-factor ANOVA test was performed to assess the statistical significance of the relationships among these independent variables and language learning outcomes. The ANOVA findings indicated whether variations in language proficiency across the social groups (military and civilians) were statistically significant, thereby corroborating or refuting the null hypotheses established for the study, as outlined by Leedy and Ormrod (2021, p. 210).

Results

The Kaduna NAF Base, like other military settings, is a highly organised community with clear social stratification based on class and rank hierarchies. This social stratification reflects the power dynamics between soldiers and soldiers-civilian groups. A key assumption in this study is that language learning outcomes may be influenced by an individual's social class – because linguistic performance often mirrors one's position within a social structure and could lead to social distance from non-group members. This gives rise to the first research question, "To what extent does social class influence language learning outcomes among residents of the Kaduna NAF Base?". In order to explore this relationship between social class and language learning, Question 1 from the questionnaire was analysed: "Which group, in your opinion, ranks best in the use of English language in the Kaduna NAF Base?" The responses are presented in the table below.

Table 1

Responses to Social class and language learning

SOCIAL CLASS	OFFICERS	AIRMEN/AIRWOMEN	CIVILIANS	NO ANSWERS	TOTAL
Officers	16 (69.57%)	0 (0%)	5 (21.75%)	2 (8.70%)	23 (100%)
Airmen/ Airwomen	23 (35.38%)	29 (44.62%)	0 (0%)	1 (1.53%)	65 (100%)
Civilians	58 (51.79%)	10 (8.93%)	42 (37.50%)	2 (1.79%)	112 (100%)

The table shows that the Officers do not consider their subordinates (the airmen or other ranks as good users of the English language, giving them a score of 0. The same pattern of low scores indicating out-group apathy could be seen in the scores from the rival social classes.

This study then proceeds to test the null hypothesis on the link between language learning and social class and identity:

- H_0 : There is no significant difference in language learning outcomes among social classes in the Kaduna NAF Base.

The data from Table 1 was subjected to a Single Factor ANOVA analysis, and the results are presented below:

Table 2

ANOVA results for social class and language learning

SOURCE OF VARIATION	SS	DF	MS	F	P-VALUE	F CRIT
Between Groups	474.33	2	237.17	21.72	< .001	3.04
Within Groups	1371.00	197	6.96			
Total	1845.33	199				

The ANOVA results reveal that the F-statistic ($F = 21.72$) exceeds the critical value ($F_{crit} = 3.04$) at $\alpha = 0.05$; consequently, the null hypothesis is rejected, indicating a statistically

significant difference in language learning outcomes across the three social classes (Officers, Airmen/ Airwomen, Civilians) in the Kaduna NAF Base.

These findings support the assertion that social class plays a pivotal role in shaping language proficiency within the military base. For instance the fact that the Officers were perceived by respondents as having the highest proficiency in English could be traced to their higher educational attainment, formal training, and frequent exposure to professional environments that demand advanced language skills. The Airmen/ Airwomen were seen to demonstrate moderate proficiency which reflect their intermediate position in the social hierarchy and more practical, task-oriented roles. The Civilians, while diverse in their backgrounds, were rated lowest overall, possibly because they include individuals with varying levels of education and less direct involvement in the structured linguistic environment of the military.

Temporal factors like the duration of stay at a particular place could influence language learning outcomes. To explore this relationship in line language learning, the research question was formulated: "How does duration of stay affect language variation and proficiency within the Kaduna NAF Base?" Question 2 from the questionnaire was analysed: "Would you attribute the performance of military personnel in the use of English to the length of time spent in training camps (e.g., the NDA course or Basic Recruitment Programme)?" The responses are presented in the table below.

Table 3

Responses to Question 2 (Duration at Training Camps and Language Performance)

SOCIAL CLASS	AGREE	DISAGREE	NO ANSWER	TOTAL
Officers	13 (56.52%)	7 (30.43%)	3 (13.05%)	23 (100%)
Airmen/ Airwomen	20 (30.77%)	35 (53.85%)	10 (15.38%)	65 (100%)
Civilians	41 (36.61%)	51 (45.54%)	20 (17.85%)	112 (100%)

The responses reveal notable differences across social classes. A large number of Officers (56.52%) agree that training camp experiences contribute to their proficiency in English, due to their prolonged exposure to trainings and academic courses in several fields. In contrast, Airmen/ Airwomen (53.85%) predominantly disagree, suggesting that they perceive less influence of training on their language use. Civilians (45.54%) also lean toward disagreement, reflecting their reliance on informal learning contexts rather than formal training programmes.

- H_0 : There is no significant relationship between duration of stay and language proficiency in the Kaduna NAF Base.

Table 4

ANOVA Results for Duration at Training Camps and Language Performance

SOURCE OF VARIATION	SS	DF	MS	F	P-VALUE	F CRIT
Between Groups	125.42	2	62.71	15.83	< .001	3.04
Within Groups	798.58	197	4.05			
Total	924.00	199				

The ANOVA results indicate a statistically significant relationship between training camp experiences and language proficiency. With an F-statistic (F) = 15.83, which exceeds the critical value of $F_{crit} = 3.04$ at $\alpha = 0.05$, the null hypothesis is rejected. This confirms that the length of time spent in training camps significantly influences language use among residents. However, the strength of this relationship varies across social classes, as reflected in the questionnaire responses. While the Officers benefit most from longer residency in terms of years at the NDA, the Airmen/ Airwomen and Civilians show less sensitivity to these experiences because their training programmes sometimes last just six months in duration.

Education plays a pivotal role in the Kaduna NAF Base due to its position as a key training hub for members of the Nigerian Air Force and military defence unit nationwide. To explore the relationship between educational attainment and the quality of teaching as tools for shaping language learning outcomes, Question 3 from the questionnaire was analysed: "Do the quality of the teachers/instructors in these educational/vocational institutions in the Kaduna NAF Base (e.g., the AFPS, the AFSS, TTG School) affect the learning of the English language within the Base?" The responses are presented in the table below.

Table 5

Responses to Question 3 (Teacher Quality and Language Learning)

SOCIAL CLASS	AGREE	DISAGREE	NO ANSWER	TOTAL
Officers	14 (60.87%)	5 (21.74%)	4 (17.39%)	23 (100%)
Airmen/ Airwomen	25 (38.46%)	37 (56.92%)	3 (4.62%)	65 (100%)
Civilians	56 (50.00%)	45 (40.18%)	11 (9.82%)	112 (100%)

The responses reveal significant differences in perceptions across social classes regarding the impact of teacher quality on language learning. The Officers (60.87%) largely agree that the quality of teachers significantly influences their acquisition of English, likely due to their access to structured and formal educational training courses. In contrast, the Airmen/Airwomen (56.92%) predominantly disagree, suggesting that they perceive less influence of teacher quality on their language use, possibly because their roles involve more practical, task-oriented trainings and communication. Civilians (50%) show a balanced response, reflecting their diverse educational backgrounds and reliance on both formal and informal learning contexts.

Research question 3 "Is there a significant association between educational attainment and the acquisition of Standard English or military jargon among personnel in the Kaduna NAF Base?" gives rise to the null hypothesis:

- H_{03} : There is no significant association between educational attainment and the acquisition of Standard English or military jargon in the Kaduna NAF Base

Table 6:

ANOVA Results for Teacher Quality and Language Learning

SOURCE OF VARIATION	SS	DF	MS	F	P-VALUE	F CRIT
Between Groups	144.50	2	72.25	21.72	< .001	3.04
Within Groups	653.00	197	3.31			
Total	797.50	199				

The ANOVA results confirm a statistically significant association between teacher quality and language learning outcomes. With an F-statistic (F) = 21.72, which exceeds the critical value of $F_{crit} = 3.04$ at $\alpha = 0.05$, the null hypothesis is rejected. This indicates that the quality of teachers plays a crucial role in shaping language proficiency among residents of the Kaduna NAF Base. However, the strength of this relationship varies across social classes, as reflected in the questionnaire responses. While the Officers benefit most from high-quality teaching due to their structured educational courses and academic programmes, the Airmen/Airwomen and Civilians exhibit more variability, highlighting disparities in access to quality education.

The military setting is usually male-dominated, and this cultural phenomenon provides an intriguing context for examining gender-based differences in language learning and usage. The research question: "Are there observable differences in language learning and usage between male and female residents of the Kaduna NAF Base?" served as a platform for analysing how social norms, cultural expectations, and occupational roles may influence the ways in which males and females acquire and use language within the base. To explore this dynamic, Question 5 from the questionnaire was analysed: "On average, which of these two gender divisions performs better in English language in the Kaduna NAF Base?"

Table 7

Table 7: Responses to Question 5 (Gender and Language learning)

SOCIAL CLASS	MALE	FEMALE	NO ANSWER	TOTAL
Officers	17 (73.91%)	6 (26.09%)	0 (0%)	23 (100%)
Airmen/ Airwomen	35 (53.85%)	27 (41.54%)	3 (4.61%)	65 (100%)
Civilians	62 (55.36%)	45 (41.07%)	3 (2.67%)	112 (100%)

The responses reveal a clear trend: across all social classes, males are perceived to perform better in Spoken English than females, with the Officers (73.91%) showing the strongest bias toward male superiority. Among the Airmen/Airwomen (53.85%) and Civilians (55.36%), the preference for males is slightly less pronounced but still evident. These findings suggest that gender stereotypes about language proficiency persist, though their strength varies across social groups.

- H_{04} : There is no significant difference in language learning and usage between male and female residents of the Kaduna NAF Base

Table 8

ANOVA Results for Gender and Language Learning

SOURCE OF VARIATION	SS	DF	MS	F	P-VALUE	F CRIT
Between Groups	125.42	2	62.71	15.83	< .001	3.04
Within Groups	798.58	197	4.05			
Total	924.00	199				

The ANOVA results confirm a statistically significant difference in language learning and usage between male and female residents of the Kaduna NAF Base. With an F-statistic (F) = 15.83, which exceeds the critical value of $F_{crit} = 3.04$ at $\alpha = 0.05$, the null hypothesis is rejected. This indicates that gender plays a significant role in shaping perceptions of language proficiency within the base. However, the strength of this relationship varies across social

classes, as reflected in the questionnaire responses. In instances where the Officers exhibit the strongest bias toward male superiority, the Airmen/Airwomen and Civilians show more moderate perceptions, suggesting that occupational roles and social hierarchies influence these dynamics.

There was the need to validate the statistical results by providing reasons for the perceived differences. The follow-up question was posed:” Please could you provide a reason for your choice of answer in question 5?”

Table 9

Validation Using Question 5 (Reasons for Perceived Differences)

SOCIAL CLASS	GENDER	EDUCATIONAL OPPORTUNITY	OCCUPATIONAL FACTOR	SELF-ESTEEM	SOCIAL FACTOR	PERSONAL REASONS	NO ANSWER	TOTAL
Officers	Male	2 (11.76%)	4 (23.53%)	1 (5.88%)	2 (11.76%)	2 (11.76%)	6 (35.29%)	17 (100%)
	Female	0 (0%)	0 (0%)	3 (50%)	0 (0%)	2 (33.33%)	1 (16.67%)	6 (100%)
Airmen / Airwomen	Male	13 (33.33%)	8 (20.51%)	0 (0%)	4 (10.26%)	3 (7.69%)	11 (28.21%)	39 (100%)
	Female	2 (7.14%)	4 (14.29%)	6 (21.43%)	1 (13.57%)	7 (25.0%)	8 (28.57%)	28 (100%)
Civilians	Male	5 (8.62%)	15 (25.86%)	3 (5.17%)	14 (24.13%)	15 (25.86%)	6 (10.34%)	58 (100%)
	Female	1 (2.27%)	1 (2.27%)	24 (54.55%)	7 (15.91%)	11 (25.0%)	0 (0%)	44 (100%)

The responses to Question 6 provide valuable insights into the factors influencing perceptions of gender-based language proficiency. For instance:

- Among the Officers, males attribute their perceived superiority to occupational factors (23.53%) and personal reasons (11.76%) , while females emphasise self-esteem (50%) and social factors (33.33%).
- Among the Airmen/Airwomen, males highlight educational opportunities (33.33%) and occupational factors (20.51%), whereas females focus on self-esteem (21.43%) and social factors (25%).
- Among the Civilians, males cite social factors (24.13%) and personal reasons (25.86%), while females overwhelmingly attribute their challenges to self-esteem (54.55%) and social factors (15.91%).

These findings reveal that societal, cultural, and psychological factors, such as self-esteem and social expectations, play a significant role in shaping perceptions of gender-based language proficiency.

Discussion

The findings of this study offer a comprehensive exploration into how social variables shape language learning and usage within the Kaduna NAF Base settings. Drawing on Basil Bernstein's Code Theory, which distinguishes between restricted and elaborated codes, the research highlights how hierarchical structures, settlement patterns, duration of stay, educational attainment, and gender differences influence communication patterns among residents. Restricted codes, as described by Bernstein (2000), are implicit, context-dependent, and rely on shared understandings, making them prevalent in close-knit groups such as rank-based units or combat teams. In contrast, elaborated codes—explicit, context-independent, and accessible to broader audiences—are more commonly used in formal settings like training manuals, policy documents, or cross-rank communications.

One of the most striking findings is the significant relationship between social class and language proficiency within the Kaduna NAF Base. The Officers, who occupy higher ranks and leadership positions, demonstrate greater proficiency in Standard English compared to the Airmen/Airwomen and Civilians. This disparity aligns with Bernstein's argument that middle-class occupations tend to foster elaborated codes through participation and discussion, while working-class roles often rely on restricted codes rooted in practical, task-oriented communication (Moore, 2013). For instance, 57.17% of Officers agreed that the duration of stay influenced their language use, compared to only 33.85% of Airmen/Airwomen. Similarly, 66.07% of Civilians attributed their proficiency to prolonged exposure to the base environment. These statistics emphasised on how access to military power and leadership responsibilities enhances the Officers' ability to use elaborated codes effectively. In contrast, Airmen/Airwomen and Civilians, whose roles involve more practical, hands-on tasks, show less sensitivity to time and training, relying instead on restricted codes shaped by their job specifications as lower class personnel. The emphasis on restricted codes among lower-ranking personnel reflects the functional nature of their roles, where communication is often brief, direct, and context-specific, mirroring Bernstein's description of restricted codes as tools for communicative efficiency within closed groups (Barrett, 2024).

Duration of Stay and Language Learning

The study also reveals that the duration of stay significantly influences language proficiency, though its impact varies across social classes. The Officers and Civilians, who largely agree that prolonged exposure to the base environment shapes their language use, appear to adapt more readily to formal linguistic norms. For example, 66.07% of Civilians and 57.17% of Officers acknowledged the role of time in shaping their language proficiency. In contrast, only 33.85% of Airmen/Airwomen shared this view, suggesting that their reliance on restricted codes limits their adaptability to elaborated codes over time. This divergence highlights how temporal factors of length of residency could affect language learning, with the Officers benefiting from a longer stay at the NDA, AFIT, and other military colleges to reinforce the creation and usage of elaborated codes. In contrast, the Airmen/Airwomen and Civilians remain embedded in locational and spatial contexts that prioritise restricted codes. These findings are in line with Bernstein's emphasis on the role of socialisation and occupational arrangements in controlling the ways codes are learned and used (Bernstein, 2000).

Teacher Quality and Language Learning

Teacher quality emerges as another critical variable influencing language learning outcomes within the Kaduna NAF Base. The ANOVA results reveal a statistically significant

relationship between teacher quality and language proficiency, with an F-statistic of 21.72 exceeding the critical value of 3.04. The Officers, who have greater access to high-quality education and structured training programmes, show the strongest association between teacher quality and proficiency. This finding aligns with Bernstein's argument that elaborated codes are often cultivated through formal education and structured environments, where learners are encouraged to articulate their thoughts fully and engage in explicit communication (Barrett, 2024). In contrast, the Airmen/Airwomen and Civilians, who may lack access to similar academic resources, rely more on restricted codes which are shaped by informal learning contexts. These disparities highlight the need for better education policies that would enable all personnel (military and civilian) to have access to high-quality instruction that fosters elaborated codes in language learning.

Gender Differences in Language Use

Gender differences further complicate these dynamics, with males perceived to outperform females in spoken English across all social classes. Among the Officers, 73.91% attributed better performance to males, compared to 53.85% of Airmen/Airwomen and 55.36% of Civilians. These perceptions, influenced by societal factors such as self-esteem, occupational roles, and cultural expectations, reflect broader biases that persist even in macho-oriented environments like the Kaduna NAF Base. For instance, male officers often attribute their perceived superiority to occupational factors and personal reasons, while female officers emphasise self-esteem and social factors. These findings resonate with Bernstein's concept of positional authority, where restricted codes often reinforce traditional power dynamics, while elaborated codes align with more egalitarian forms of communication in similar contexts (Uwen & Mensah, 2022). The NAF authority can promote workable language learning opportunities and challenge gender stereotypes that hinder societal progress by addressing the age-long perception that certain jobs and roles (like fighter pilot position,) are exclusively reserved for members of the masculine gender; and increasing the quota for the number of women who could be recruited into the force annually.

Summary and Conclusion

The insights from the findings contribute significantly to the interplay of language learning and social variables by illustrating how formal and specialised codes contribute to social inequalities within military settings. The work also highlights the need for the Nigerian government and the NAF leadership to promulgate targeted interventions when address disparities in language learning outcomes. For instance, the provision of better access to quality education to members of the lower strata in the military organisation, as well as promoting gender-inclusive practices like allowing women to engage in traditional male-dominated roles, could bridge gaps in proficiency among the soldiers and civilians.

This study has assessed how social variables such as social class, duration of stay, educational attainment, and gender differences influence language learning within the Kaduna NAF Base. Using Bernstein's Code Theory as a framework, the work evaluated how Officers (commissioned personnel), Airmen/Airwomen (non-commissioned officers), and civilians learn and use English in both formal and informal settings. The findings, derived from a questionnaire survey, reveal four key insights.

First, social class significantly impacts language proficiency, with the Officers demonstrating higher levels of Standard English compared to the Airmen/Airwomen and Civilians. This disparity is attributed to their access to structured environments, professional expectations, and greater exposure to elaborated codes. Second, the duration of stay and exposure to training camps were found to have a statistically significant effect on language acquisition, particularly for officers who benefit from prolonged engagement with formal linguistic norms

at institutions like the Nigerian Defence Academy. Third, the quality of teaching personnel emerged as a critical factor in shaping language proficiency, with officers showing the strongest association between high-quality education and language performance. Finally, gender-based perceptions revealed a persistent bias favouring males in language proficiency, influenced by societal factors such as self-esteem, occupational roles, and cultural expectations.

These findings extend beyond the immediate context of the Kaduna NAF Base, offering valuable contributions to both Bernstein's Code Theory and military language research. The study highlights how power dynamics and institutional hierarchies shape communication patterns in occupational settings by applying Bernstein's concepts of restricted and elaborated codes. Furthermore, the research is significant to global military language studies by emphasising the role of environmental factors, educational opportunities, and settlement structures in promoting language acquisition and proficiency.

Despite its contributions, this study has limitations. The reliance on self-reported data through the questionnaire exercises may introduce biases or inaccuracies in respondents' perceptions, and the focus on the Kaduna NAF Base limits the generalisability of the findings to other military contexts like the Nigerian Army or Nigerian Navy. Future research could address these gaps by incorporating observational methods, expanding the geographical scope, or exploring longitudinal trends in language learning and performance.

To sum it up, this study highlights the significant influence of social, temporal, and institutional factors on language learning within military structures. It validates Bernstein's Code Theory and contributes to military language research by emphasising the role of social variables which affect power dynamics directly. Continued exploration of these language learning patterns can foster inclusive communication and cohesion within structured communities like the Kaduna NAF Base.

References

- Adams, K., & Nakano, S. (2024). Connecting student interest and motivation in English to the Sustainable Development Goals. *IAFOR Journal of Education*, 12(1), 243-262.
- Alasgarova, R., Rzayev, J., & Bakhadirov, M. (2024). Language attrition and cultural identity dynamics in international schools in Azerbaijan. *IAFOR Journal of Education*, 12(1), 12-43.
- Bamigbola, E. O. (2022). A pragmatic analysis of language use of Nigerian Army on parade ground. *International Journal of Language and Literary Studies*, 4(2), 347-360.
- Barrett, B. (2024). *Basil Bernstein: Code theory and beyond*. Springer.
- Bernstein, B. (2000). *Pedagogy, symbolic control and identity: Theory, research, critique* (Rev. Ed.). Rowman and Littlefield.
- Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative and mixed methods approaches* (6th ed.), Sage.
- Doeden, L., & Smidt, E. (2024). Adoption of innovative ELT strategies by English language teachers in rural Laos. *IAFOR Journal of Education*, 12(1), 169-198.
- Evans, N., & Levinson, S. (2009). The myth of language universals: Language diversity and its importance for cognitive science. *Behavioural and Brain Sciences*, 32(5), 429-492.
- Gumperz, J. J., & Cook-Gumperz, J. (2008). Studying language, culture, and society: Sociolinguistics or linguistic anthropology? *Journal of Sociolinguistics*, 12(4), 532-545.
- Hoyle, C. (2017). World air forces directory. *Flight International*, 192(5615), 26-57.

- Kamusella, T. (2016). The history of the normative opposition of 'language versus dialect': From its Graeco-Latin origin to Central Europe's ethnolinguistic nation-states. *Colloquia Humanistica*, 5(5), 189–198. <https://doi.org/10.11649/ch.2016.011>
- Leedy, P. D., & Ormrod, J. E. (2021). *Practical research: Planning and design* (12th ed.). Pearson.
- Lightfoot, D. (2010). Language acquisition and language change. *WIREs Cognitive Science*, 1(5), 677–684. <https://doi.org/10.1002/wcs.39>
- Martin, G. (2012). Nigerian regeneration. *Air International*, 83(5), 84–89.
- Moore, R. (2013). *Basil Bernstein: The thinker and the field*. Routledge.
- Nigerian Air Force. (2021, July 17). Application guidelines for DSSC enlistment. Retrieved from <https://airforce.mil.ng/news/application-guidelines-for-dssc-enlistment681243696>.
- Nigerian Air Force. (2024). History. Retrieved from <https://airforce.mil.ng/history>.
- Revell, L., Bowie, B., Woolley, M., & Riordan, J.-P. (2024). Teachers' use of questions and the science/religion encounter: Basil Bernstein and the impossibility of the unthinkable. *Journal of Religious Education*, 72(3), 295-309.
- Shodieva, M. (2024). Sociolinguistic approaches: Understanding language in social contexts. *Modern Science and Research*, 3(1), 69-75.
- Uwen, G., & Mensah, E. (2022). Tomorrow may not be yours: Military slang and jargon as linguistic performance in Nigeria. *Language Matters: Studies in the Languages of Southern Africa*, 53(3), 91-111.
- Zighadina, D. S. (1997). *Architects of the Nigerian Air Force*. Central Lithographic Services.
- Zhao, M., Noordin, N., Ahmad, N. K. B., & Liu, L. (2025). Effectiveness of Mobile-assisted Language Learning in developing oral English in higher education: A comparative systematic review. *World Journal of English Language*, 15(1).