

# Comparison of Article Titles in Nursing and English-language Education

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## Abstract

Although different academic disciplines observe different styles and conventions for the titles of articles in their fields, no study has focused on comparing article titles in nursing and English-language education. In response, the study involved comparing 160 titles in the leading journals in nursing and English-language education. The results revealed several significant differences in terms of language and content, and, as such, may be useful for non-nursing language teachers in a position to teach article writings in English.

## 1. Introduction

Studies have shown that the titles of academic papers vary in terms of language and content depending on the field (Nagano, 2015; Milojević, 2017). In a previous study, I showed how the titles of articles on nursing in Japan differ in several significant ways from those in international journals with high impact factors (Ichiyama, 2021)—namely, in style, length, structure, and content.

Even so, studies on the differences between the titles of theses in the humanities, including English-language education and linguistics, and those in the sciences have been limited. A notable exception is Afful and Akito's (2010) comparison of titles of literature and chemistry theses, which revealed that chemistry theses use prepositions less often.

In light of those findings, academic writing classes should be required to provide instruction in accordance with academic disciplines. However, language teachers, not subject specialists, often teach writing in academic writing classrooms. Although language teachers may be somewhat familiar with writing papers in their own fields of specialization, including English-language education and applied linguistics, they may lack the knowledge and experience needed for writing articles in other fields (Ramoroka, 2012; Rachayon, 2020).

In interviews with 18 faculty members and nine students, Ramoroka (2012) examined whether the content learned in a non-discipline-specific academic writing classes helped students to write papers in their disciplines. Among the results, the students felt that they had not acquired how to write in their own discipline, even they acknowledged some benefits of writing in general topics.

More recently, Rachayon (2020) has suggested that successfully teaching English in a subject outside one's field of expertise requires conducting at least some research on which practices prevail in the field.

Considering those trends and findings, the purpose of the study was to examine whether the titles of articles in nursing differ from those in the humanities, especially ones in English-language education.

## 2. Methods

The titles of 80 articles on nursing research in an international nursing journal, the *International Journal of Nursing Studies* (*IJNS*), and another 80 articles in the international English-language education journal, *ELT-Journal* (*ELT-J*), all published from 2016 to 2018, were examined for their differences, if any, between their academic disciplines—that is, nursing and English-language education. The journals were selected with references to Nwogu's (1997) three criteria for selecting data: degree of representativeness, reputation, and accessibility. In particular, the journal had to cover a wide range of disciplines, and the norms could not be limited to a relatively narrow field, impact factor, or readership. Beyond that, only original research papers were included, whereas reviews, short reports, recommendations, and editorials were not.

Titles were entered into an Excel spreadsheet to count the number of words, and to code the content. Once the content of titles was classified, a two-sample *t*-test was conducted to analyze the differences in the length and content of the titles of the two types of journals articles.

The content of titles was investigated for several features based on the works of Akhtar (2019) and Andrade (2019). According to Akhtar (2019), a research design needs to include a reference to any or all of three concepts: methods of data collection, methods of measurement, and methods of data analysis. The following sixteen words or phrases were selected as keywords to describe the research design (Andrade, 2019; Akhtar 2019): “empirical”; “observation” or “observational”; “retrospective,” “prospective,” or “cohort”; “cross-sectional” or “longitudinal”; “uncontrolled” or “controlled”; “nonrandomized” or “randomized”; “exploratory” or “confirmatory”; “case study” or “action report.”

Seven additional words or phrases were selected as keywords to describe the data collection procedures, types of data, and approach to data analysis: “questionnaire”; “interview”; “observation”; “meta-analysis” or “secondary data”; “qualitative,” “quantitative,” or “mix method”; “structural equation approach.”

## 3. Results

A significant difference emerged in the average number of words in titles of articles in

the *IJNS* ( $M = 17.98, SD = 20.99$ ) versus those in the *ELT-J* ( $M = 7.62, SD = 4.64$ ),  $t(158) = 18.3, p = 6.96E-41$ . This result indicates that the titles of articles in the nursing journals tend to be longer than those in English-language education journals.

However, no a significant difference surfaced in the average number of letters per word in the titles of articles between the *IJNS* ( $M = 7.479, SD = 0.46$ ) and *ELT-J* ( $M = 7.82, SD = 2.7$ ),  $t(105) = -1.7, p = .08$ . This result indicates that the number of letters in the words used in the titles of articles in the nursing journals and the English-language education journals tends to be approximately the same.

Another significant difference emerged in the number of terms related to the research design, including data collection procedures, data analysis, and types of data, between the titles of articles in the *IJNS* ( $M = 1.06, SD = 0.21$ ) and *ELT-J* ( $M = 0.13, SD = 0.12$ ),  $t(147) = 14.37, p = 8.22E-30$ . The results indicate that articles in the *IJNS*, one of the most prominent nursing journals, use more terms related to research design, data collection, data analysis, and types of data, and others in their titles than articles in *ELT-J*, a leading journal in English-language education.

Tables 1 and 2 list the frequency of terms related to research design, data collection, data analysis, types of data, and others in the titles of articles in the *IJNS* and *ELT-J*, respectively. As Table 1 shows, randomized controlled trials or cross-sectional studies were mentioned in nearly half (46%) of the 80 titles in the *IJNS*. By contrast, Table 2 shows that only six (8%) of the 80 titles in *ELT-J* mentioned research design, and none of them included terms related to data collection, data analysis, or type of data.

**Table 1** Frequency of words and phrases referring to research design, data collection, data analysis, type of data, and others in the titles of the *IJNS*

<b>Research design</b>	Frequency
Randomized controlled trial	19
Cross-sectional study	18
Qualitative study	7
Retrospective study	5
Observational study	5
Mixed method study	3
Ethnographic study	2
Descriptive study	1
<b>Data collection</b>	Frequency
Questionnaire	2
Interview	1

<b>Data analysis</b>	Frequency
Structural equation approach	1
Grounded theory	1
<b>Types of data</b>	Frequency
Secondary analysis	3

**Table 2** Frequency of words and phrases referring to research design, data collection, data analysis, type of data, and others used in titles in *ELT-J*

<b>Research design</b>	Frequency
Action research	3
Case study	3

Tables 3 and 4 show the frequency and percentage of participant-related terms or phrases in the titles of articles in the *IJNS* and *ELT-J*. As shown in Table 3, more than 10 different words were used in the titles of articles in the *IJNS*. By comparison, as shown in Table 4, the titles of articles in *ELT-J* mentioned only four types of words: namely ones related to teachers, learners, students, and professionals. In addition, 30% of the participants in the studies in those articles were teachers, which is a characteristic of research published in *ELT-J*.

**Table 3** Frequency and percentage of words that are referring to participants in the the titles of articles in *IJNS*

Word	Frequency	%
Nurse(s)	11	13.75
Patient(s)	8	10
Family or families	7	8.75
Student(s)	3	3.75
People	3	3.75
Staff	3	3.75
Managers	2	2.5
Women	2	2.5
Worker(s)	2	2.5
Adult(s)	2	2.5
Professionals	2	2.5

**Table 4** Frequency and percentage of words referring to participants in the titles of articles in *ELT-J*

Word	Frequency	%
Teacher(s)	24	30
Learner(s)	6	7.5
Student(s)	2	2.5
Professional(s)	2	2.5

## 4. Discussion

As Rachayon (2020) has shown, English-language teachers who are not necessarily experts in another academic discipline can nevertheless teach specialized subjects in English but need to have some knowledge of the subject. That specific ways of writing academic papers and article titles exist in different fields is a significant finding for many language teachers especially those with background in the humanities. English-language teachers who teach in the field of nursing should be aware that, first, the content of the title of articles in nursing journals differs from journal to journal, and, second, those titles generally include references to the research design, unlike the titles of articles in humanities journals.

## 5. Conclusion

While the results are indicative and informative, these results cannot be generalized because of the limited sample sizes. Future studies should expand and update the number of journals represented. However, they can be taken as a point of departure for more research since this field lacks studies in the EFL context.

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**Appendix 1.** 80 titles of IJNS

- 1 *Toileting behaviours and lower urinary tract symptoms among female nurses: A **cross-sectional questionnaire survey***
- 2 *Self-reported exposure to severe events on the labour ward among Swedish midwives and obstetricians: A **cross-sectional retrospective study***
- 3 *The effectiveness of using a bath oil to reduce signs of dry skin: A **randomized controlled pragmatic study***
- 4 *Measurement of fatigue: Comparison of the reliability and validity of single-item and short measures to a comprehensive measure*
- 5 *The effect of early psychological symptom severity on long-term functional recovery: A **secondary analysis** of data from a **cohort study** of minor injury patients*
- 6 *Persistent and new-onset daytime sleepiness in pregnant women: A prospective **observational cohort study***
- 7 *Nurses' experiences of working in organizations undergoing restructuring: A **metasynthesis of qualitative research studies***
- 8 *Work environment characteristics associated with quality of care in Dutch nursing homes: A **cross-sectional study***
- 9 *Mobbing among care workers in nursing homes: A **cross-sectional secondary analysis** of the Swiss Nursing Homes Human Resources Project*
- 10 *Devices and dressings to secure peripheral venous catheters: A **Cochrane systematic review and meta-analysis***
- 11 *Fatigue in hospital nurses ? 'Supernurse' culture is a barrier to addressing problems: A **qualitative interview study***
- 12 *Encouraging early discussion of life expectancy and end-of-life care: A **randomised controlled trial** of a nurse-led communication support program for patients and caregivers*
- 13 *Exploring awareness and help-seeking intentions for testicular symptoms among heterosexual, gay, and bisexual men in Ireland: A **qualitative descriptive study***
- 14 *Effectiveness of an educational intervention (the Encourage Autonomous Self-Enrichment Program) in patients with chronic kidney disease: A **randomized controlled trial***
- 15 *Breastfeeding attitude, health-related quality of life and maternal obesity among multi-ethnic pregnant women: A multi-group **structural equation approach***
- 16 *The impact of nUrsiNg DELiRium Preventive INterventions in the Intensive Care Unit (UNDERPIN-ICU): A **study protocol for a multi-centre, stepped wedge randomized controlled trial***
- 17 *Advance directives and mortality rates among nursing home residents in Taiwan: A **retrospective, longitudinal study***
- 18 *Comparison of the effectiveness of two styles of case-based learning implemented in lectures for developing nursing students' critical thinking ability: A **randomized controlled trial***
- 19 *The Little Schmidy Pediatric Hospital Fall Risk Assessment Index: A **diagnostic accuracy study***
- 20 *Effect of venepuncture process design on efficiency and failure rates: A **simulation model study for secondary care***

- 21 *Using Experience-based Co-design with older patients, their families and staff to improve palliative care experiences in the Emergency Department: A **reflective critique** on the process and outcomes*
- 22 *Are nurse-led chemotherapy clinics really nurse-led? An **ethnographic study***
- 23 *A nurse facilitated mind-body interactive exercise (Chan-Chuang qigong) improves the health status of non-Hodgkin lymphoma patients receiving chemotherapy: **Randomised controlled trial***
- 24 *Identifying elder abuse & neglect among family caregiving dyads: A **cross sectional study** of psychometric properties of the QualCare scale*
- 25 *Predictors of depression in outpatients with heart failure: An **observational study***
- 26 *Paediatric nurses' perceptions and practices of family-centred care in Saudi hospitals: A **mixed methods study***
- 27 *Waiting time to surgery is correlated with an increased risk of serious adverse events during hospital stay in patients with hip-fracture: A **cohort study***
- 28 *The effectiveness of standardized skin care regimens on skin dryness in nursing home residents: A **randomized controlled parallel-group pragmatic trial***
- 29 *Predicting medical professionals' intention to allow family presence during resuscitation: A **cross sectional survey***
- 30 *The effect on patient outcomes of a nursing care and follow-up program for patients with heart failure: A **randomized controlled trial***
- 31 *Risk behaviours for organism transmission in health care delivery—A two month unstructured **observational study***
- 32 *Interventions and working relationships of voluntary organisations for diabetes self-management: A **cross-national study***
- 33 *Sexual harassment in care work – Dilemmas and consequences: A **qualitative investigation***
- 34 *The efficacy of a nutrition education intervention to prevent risk of malnutrition for dependent elderly patients receiving Home Care: A **randomized controlled trial***
- 35 *The efficacy of a nutrition education intervention to prevent risk of malnutrition for dependent elderly patients receiving Home Care: A **randomized controlled trial***
- 36 *Effect of goal attainment theory based education program on cardiovascular risks, behavioral modification, and quality of life among patients with first episode of acute myocardial infarction: **Randomized study***
- 37 *The relationship between perceived role and appropriate use of peripherally inserted central catheters: A **survey** of vascular access nurses in the United States*
- 38 *Does participating in a clinical trial affect subsequent nursing management? Post-trial care for participants recruited to the INTACT pressure ulcer prevention trial: A follow-up **study***
- 39 *How appropriate are the English language test requirements for non-UK-trained nurses? A **qualitative study** of spoken communication in UK hospitals*
- 40 *Influence of organizational context on nursing home staff burnout: A **cross-sectional survey** of care aides in Western Canada*
- 41 *The association of eating performance and environmental stimulation among older adults with dementia in nursing homes: A **secondary analysis***
- 42 *Self-reported confidence in patient safety knowledge among Australian undergraduate nursing students: A multi-site **cross-sectional survey study***
- 43 *The relationship between work engagement and psychological distress of hospital nurses and the perceived communication behaviors of their nurse managers: A **cross-sectional survey***
- 44 *Tourniquet application after local forearm warming to improve venodilation for peripheral intravenous cannulation in young and middle-aged adults: A single-blind prospective **randomized controlled trial***
- 45 *Workplace violence against nurses: A **cross-sectional study***
- 46 *A comparison of medication administration errors from original medication packaging and multi-compartment compliance aids in care homes: A prospective **observational study***
- 47 *The impact of automatic devices for capillary blood collection on efficiency and pain response in newborns: A **randomized controlled trial***
- 48 *Improving insomnia in primary care patients: A **randomized controlled trial** of nurse-led group treatment*

- 49 *Pressure mapping to prevent pressure ulcers in a hospital setting: A pragmatic **randomised controlled trial***
- 50 *Implementing monitoring technologies in care homes for people with dementia: A **qualitative exploration using Normalization Process Theory***
- 51 *A two phased **study** on health care professionals' perceptions of single or multi-use of intermittent catheters*
- 52 *Dry skin and pressure ulcer risk: A multi-center **cross-sectional prevalence study** in German hospitals and nursing homes*
- 53 *Predictors of occupational stress and well-being in First-Line Nurse Managers: A **cross-sectional survey study***
- 54 *Nurse practitioners as primary care providers with their own patient panels and organizational structures: A **cross-sectional study***
- 55 *Oxygen therapy for acute myocardial infarction: A **systematic review and meta-analysis***
- 56 *Similarity and accuracy of mental **models** formed during nursing handovers: A **concept mapping approach***
- 57 *Effects of a nurse-led transitional care program on clinical outcomes, health-related knowledge, physical and mental health status among Chinese patients with coronary artery disease: A **randomized controlled trial***
- 58 *The effects of family-centered affective stimulation on brain-injured comatose patients' level of consciousness: A **randomized controlled trial***
- 59 *Safe patient handling behaviors and lift use among hospital nurses: A **cross-sectional study***
- 60 *Effects of a training program for home health care workers on the provision of preventive activities and on the health-related behavior of their clients: A quasi-experimental **study***
- 61 *Explaining transgression in respiratory rate **observation** methods in the emergency department: A classic **grounded theory analysis***
- 62 *Family support liaison in the witnessed resuscitation: A phenomenology **study***
- 63 *Self-management support by final year nursing students: A correlational **study** of performance and person-related associated factors*
- 64 *Prior depression and incident back pain among military registered nurses: A **retrospective cohort study***
- 65 *Association of nurse work environment and safety climate on patient mortality: A **cross-sectional study***
- 66 *Spotlight on equality of employment opportunities: A **qualitative study** of job seeking experiences of graduating nurses and physiotherapists from black and minority ethnic backgrounds*
- 67 *A sense of agency: **An ethnographic exploration** of being awake during mechanical ventilation in the intensive care unit*
- 68 *The cost-effectiveness of a patient centred pressure ulcer prevention care bundle: Findings from the INTACT cluster **randomised trial***
- 69 *How does emotional exhaustion influence work stress? Relationships between stressor appraisals, hedonic tone, and fatigue in nurses' daily tasks: A longitudinal **cohort study***
- 70 *Nurses' reports of staffing adequacy and surgical site infections: A **cross-sectional multi-centre study***
- 71 *The effectiveness of the Pain Resource Nurse Program to improve pain management in the hospital setting: A cluster **randomized controlled trial***
- 72 *Association between home-visit nursing utilization and all-cause hospitalization among long-term care insurance beneficiaries: A **retrospective cohort study***
- 73 *An evaluation of involving family caregivers in the self-care of heart failure patients on hospital readmission: **Randomised controlled trial** (the FAMILY **study**)*
- 74 *Sufficiency and relevance of information for inpatients in general ward settings: A **qualitative exploration of information exchange between patients and nurses***
- 75 *Improving delirium recognition and assessment for people receiving inpatient palliative care: a **mixed methods meta-synthesis***
- 76 *Mental health nurses' emotions, exposure to patient aggression, attitudes to and use of coercive measures: **Cross sectional questionnaire survey***



- 77 *Staff working in hospital units with greater social capital experience less work-home conflict: **Secondary analysis of a cross-sectional study***
- 78 *Timing of palliative care team referrals for inpatients receiving rapid response services: A **retrospective pilot study** in a US hospital*
- 79 *How does the length of day shift affect patient care on older people's wards? A **mixed method study***
- 80 *Nurses' personal and ward accountability and missed nursing care: A **cross-sectional study***

**Appendix 2.** 80 titles of ELT-J

- 1 *Language teacher **action research**: achieving sustainability*
- 2 *Learning styles and teacher training: are we perpetuating neuromyths?*
- 3 *Teacher language awareness in supervisory feedback cycles*
- 4 *From 'Plodder' to 'Creative': feedback in teacher education*
- 5 *Handwriting as a tool for learning in ELT*
- 6 *EFL young learners: their imagined communities and language learning*
- 7 *Switching codes in the plurilingual classroom*
- 8 *The experience of initial management training in ELT*
- 9 *Adaptive learning*
- 10 *Creating new words: affixation in neologisms*
- 11 *Language teacher associations: key themes and future directions*
- 12 *Language teacher associations in Japan: knowledge producers and/or knowledge disseminators*
- 13 *Membership, belonging, and identity in the twenty-first century*
- 14 *The cultural roots of teacher associations: a **case study** from India*
- 15 *English language teacher development through teacher associations: the case of NELTA*
- 16 *The non-native English speaker teachers in TESOL movement*
- 17 *The Film in Language Teaching Association (FILTA): a multilingual community of practice*
- 18 *Virtually unknown: teacher engagement in an online conference*
- 19 ***Researching teacher associations***
- 20 *Transforming professional learning into practice*
- 21 *The taped monologue as narrative technique for reflective practice*
- 22 *Initial teacher training courses and non-native speaker teachers*
- 23 *A pedagogic cycle for EFL note-taking*
- 24 *Integrating reading and writing through extensive reading*
- 25 *Collaborative revision in L2 writing: learners' reflections*
- 26 *Using automated writing evaluation to reduce grammar errors in writing*
- 27 *CLIL and non-CLIL: differences from the outset*
- 28 *Special educational needs and technology in language learning*
- 29 *Pre-empting and signalling non-understanding in ELF*
- 30 *Supporting the writing up of teacher **research**: peer and mentor roles*
- 31 *Navigating the challenges arising from university-school collaborative **action research***
- 32 *E-portfolios in teacher development: the better option?*
- 33 *Twelve years of telecollaboration: what we have learnt*
- 34 *Report from Middle-Earth: fan fiction tasks in the EFL classroom*
- 35 *The representation of pragmatic knowledge in recent ELT textbooks*
- 36 *An academic literacies argument for decentralizing EAP provision*
- 37 *Bringing real-life language use into EFL classrooms*
- 38 *Turn-taking and silent learning during open class discussions*
- 39 *Formative assessment in discussion tasks*
- 40 *A discourse-based evaluation of a classroom peer teaching project*
- 41 *The figurative and polysemous nature of collocations and their place in ELT*
- 42 *Investigating teacher perceptions of feedback*
- 43 *Incorporating corpus literacy skills into TESOL teacher training*
- 44 *One-to-one computer initiatives*
- 45 *Spelling pronunciation in English*

- 46 *Receptivity to learner-driven feedback in EAP*
- 47 *Free-form writing: computerized feedback for self-correction*
- 48 *Effective teacher talk: a threshold concept in TESOL*
- 49 *Positive assessments in teacher learning*
- 50 *Teachers' cognitions regarding continuing professional development*
- 51 *Cultural learning in the EFL classroom: the role of visuals*
- 52 *Language background and learners' attitudes to own-language use*
- 53 *A potted history of PPP with the help of ELT Journal*
- 54 *Misunderstanding comprehension*
- 55 *Comprehending misunderstanding*
- 56 *Integrating corpus tools on intensive CELTA courses*
- 57 *Equity and enrichment in the TESOL practicum*
- 58 *Reading and spelling difficulties in the ELT classroom*
- 59 *Student-to-student legacies in exploratory **action research***
- 60 *Student engagement with computer-generated feedback: a **case study***
- 61 *The effect of conversation engagement on L2 learning opportunities*
- 62 *Influences of early English language teaching on oral fluency*
- 63 *Understanding curriculum change in an ELT school in **Greece***
- 64 *Informal and deliberate learning with new technologies*
- 65 *The affordances of digital multimodal composing for EFL learning*
- 66 *Reinvention of classroom practice innovations*
- 67 *Interrogating your wisdom of practice to improve classroom practices*
- 68 *Songs in the young learner classroom: a critical **review** of evidence*
- 69 *Using vocabulary notebooks for vocabulary acquisition and teaching*
- 70 *Language learners' and teachers' perceptions of task repetition*
- 71 *What makes CLIL leadership effective? A **case study***
- 72 *The (ir)relevance of academic **research** for the language teacher*
- 73 *'Only connect': **researchers** and teachers in dialogue*
- 74 *Incorporating Global Englishes into the ELT classroom*
- 75 *Out-of-class communication and awareness of English as a Lingua Franca*
- 76 *Reimagining English language learners from a translingual perspective*
- 77 *English as a medium of instruction: students' strategies*
- 78 *Self-regulation through portfolio assessment in writing classrooms*
- 79 *Lecturers' and students' perceptions of the use of modifiers*
- 80 *The use of video in microteaching: affordances and constraints*