

THE INFLUENCE OF FIELD INDEPENDENCE-DEPENDENCE IN SECOND LANGUAGE ACQUISITION

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Abstract

One of indicators that marked individual differences in Second Language Acquisition is learning style. Individuals have been cognitively described as field independent and field dependent, according to whether they approach things in details or holistically. However, there is not enough study that discusses the relationship between field independence-dependence and success in language learning. This study aims to explore the influence of field independence-dependence on second language learning success. The method used in this study is a literature review. The data are collected from previous journal articles using thematic analysis. The expected findings of this study are there may be a cognitive style bias operating in relation with second language learning success. Hopefully this study contributes as additional knowledge of that particular topic in the field of Second Language Acquisition.

Keyword: Field dependence, field independence, second language acquisition

INTRODUCTION

Learning styles are cognitive, affective, and physiological traits that are relatively stable indicators of how learners perceive, interact with, and respond to their learning environment (Keefe, 1979). Every individual has their own learning style that governs the way they learn things, including language. Every language learner may develop their own learning style. Individual differences in learning styles are believed to be a critical factor to take into account in the process of second language acquisition.

Compared to other variables such as the affective and physiological factors, cognitive styles seem to be the most relevant to those associated with academic achievement (O'Brien et al., 2001). Cognitive styles are defined as information processing habits representing the learner's typical mode of perceiving, thinking, problem solving, and remembering (Messick, 1984). Individual has been cognitively described as field independent or field dependent.

Among other cognitive styles, the field independence-dependence is one of the prominent areas that are widely studied. Developed by Witkin et al. (1977), the Field Independence-Dependence classifies two different ways of information processing. Field Independence-dependence refers to how people perceive, memorize, remember, and process the information as they can influence on the way learners learn a language (Noori, 2007). Further, he elaborates that field independence learners are analytical, task oriented, internally referent, hypothesis testing, self-structuring, linear, detail oriented, and visually perceptive. Meanwhile, field dependent ones are group-oriented, global sensitive to social interactions and criticism, externally referential, not visually perceptive, non-verbal, and passive learners preferring external information structures.

The present study examines the relationship between field-dependence/independence cognitive style and success in second language learning. The educational implications of field-dependence/independence (FDI) have been explored mainly in the areas of second- language acquisition, mathematics, natural and social sciences (Coffield et al., 2004). As one of areas found in cognitive style, field-independence is believed to correlate positively and significantly with success in language classrooms (Chapelle & Roberts, 1986). Despite being the most extensively studied among the cognitive styles to date, Dornyei & Skehan (2003) encourage to study more to identify the nature of relationship between Field Dependence-Independence and success in second language learning. This study tries to investigate if there may be that said cognitive style bias operating in relation with second language learning success.

LITERATURE REVIEW

Learning Style and Cognitive Style

One of many indicators that mark individual differences is learning style. It refers to the acknowledgement that every student learns their own way. Cohen (2001) defines learning style as learners' typical preferences for approaching learning. In an

older study, Reid (1995) defines learning style as an individual's natural, habitual, and preferred ways of absorbing, processing and retaining new information and skills. Furthermore, Czizer & Dornyei (2005) define learning style as the concept represents a profile of the individual's approach to learning, a blueprint of the habitual or preferred way the individual perceives, interacts with, and responds to the learning environment. In addition, Kinsella (1995) believes that an individual's learning style is unique like signature. And this uniqueness is affected by both nature and nurture. It is a biological and developmental process. It also specifies the individual differences among students.

As stated by Keefe (1979), cognitive is one of the traits that influence the difference between every student's learning style. Sometimes synonymous but not exactly the same with learning style itself, cognitive styles basically describe a person's typical mode of thinking, remembering or problem solving. Witkin et al. (1977) characterized cognitive styles as individual differences in the way people perceive, think, solve problems, learn and relate to others.

Cognitive styles are usually conceptualized as the characteristic ways in which individuals perceive environmental stimuli, and organize and cue information (Messick, 1984). Cognitive styles are person specific and influences how people look at their environment for information. It is also defined as how they organize and interpret this information and how they use these interpretations to guide their actions (Hayes & Allison, 1998).

Field Dependence-Independence is the most well-known cognitive style. The term refers the tendency to approach the environment in an analytical and global fashion. Field independence is the ability to distinguish figures as discrete from their backgrounds as opposite to field dependence.

The Development of the Field Independence-Dependence

The Field Independence-Dependence model was introduced by Witkin and his associates in 1954. It defines people's interaction with environment and depends on what extent they perceive themselves as part of the surrounding field. Witkin developed the model by observing people's performance to their ability to visually separate an item from a complex context or field. Usually, the item was a simple geometric shape that was hidden or embedded in a more complicated drawing. In these situations, Field Independent individuals demonstrated a greater ability to overcome a given organizational context and separate or dissembled the relevant information from the surrounding stimuli. Meanwhile, Field Dependent individuals had lesser competence when performing such tasks.

In the realm of learning style, a Field Independent is defined as a tendency to separate details from the surrounding context, while a Field Dependent is defined as a relative inability to distinguish detail from other information around it. Field independent learners easily separate key details from a complex or confusing background, while their field dependent peers have trouble doing this (Hanse & Stansfield, 1981; Chapelle & Roberts, 1986). Hall (2000) pointed out that the

differences between Field Independent and Field Dependent learners are more likely the result of varying information processing skills such as selective attention, short-term memory encoding, and long-term recall at which field independent individuals are more accurate and efficient.

Field Independence

People with a characteristic being analytical can be classified as field independent. They solve problem analytically by recognizing patterns among given information and do not get lost among infinite stimuli. Saha (2018) in their study conducted in 2018, writes that Field Independence individuals are internally inclined as opposed to externally. According to Witkin & Goodenough (1981) internal/external inclination is one of the major constructs defining field independent-dependent. Field independent individuals are better at tasks which require omitting an element out of its original context and fitting it into a new context. The name field independence indicates the ability to work independently regardless of what the external field manifests. They can perform certain intellectual tasks such as imposing structure on a chaotic field, providing/designing structure different from the imposed one, process information from disorganized field. Saha (2018) further writes that Field Independent people are perceived to be cold, aloof, individualistic, self-sufficient, and mostly task-oriented.

Witkin et al. (1977) outlines characteristics of Field Independent learners as follows: analytic, competitive, independent, and individualistic; self-defined goals, strategies, and reinforcement; intrinsically motivated; poor social skills/prefer individual project; well-organized and structured in their learning; autonomous in restructuring skills.

Another study conducted by (Ellis, 2015) tries to identify the principal characteristics of field dependency and field independency. The followings are the principal characteristics of Field Independence: personal orientation (i.e., reliance on external frame of reference in processing information); holistic (i.e., perceives a field as a whole; parts are fused with background); dependent (i.e., the self-view is derived from others); socially sensitive (i.e., greater skill in interpersonal/social relationships).

Field Dependence

Field Dependent individuals may encounter difficulties to select relevant cues from a context. It mostly happens when the cues relevant in one context have no use in other context (Carter, 1988). Governor (1998) describes Field Dependence individuals are in more need of social input and external help in interpreting clues embedded in a particular learning task. But they may also be in an advantage of overlooking problems in order to see the general configuration of a problem or idea (Maghsudi, 2007). Brown (1994) classifies Field Dependent individuals with characteristics such as sociable, empathetic, attentive to the feelings and thoughts of others and considerate for their approval.

Witkin et al. (1977) outlined the characteristics of Field Dependent learners as follows: sensitive to environments; easily influenced by prevailing field or context; group oriented, global, and socially-sensitive/prefer group project; prefer externally defined goals and reinforcements, and clear definitions of desired outcomes; extrinsically motivated; less structured, less autonomous.

The followings are the principal characteristics of Field Dependence as asserted by Ellis (2015) impersonal orientation (i.e. reliance on internal frame of reference in processing information); analytic (i.e. perceives a field in terms of its component parts; parts are distinguished from background); independent (i.e. sense of separate identity); not so socially aware (i.e. less skilled in interpersonal/ social relationships).

RESEARCH METHODS

The method implemented in this study is the systematic literature review. The data are collected from all available journal articles from Google Scholar related to the influence of independence-dependence in second language acquisition. The researcher collected journal articles using the keywords field independence-dependence, individual differences in second language acquisition, or a combination of both. The findings are presented in a table that includes researchers' names and the years the articles were published; the titles of the articles; and the results of the research.

FINDINGS AND DISCUSSIONS

The findings of the research data included in the following table are summary of articles related to the influence of Field Independence-Dependence in Second Language Acquisition.

Table 1: List of Articles related to the influence of Field Independence-Dependence in Second Language Acquisition

Researcher(s) and Year of Publication	Journal	Research Results
Saha (2018)	Brac University	It is revealed that there is a relationship between Field Independence-Dependence and second language acquisition. Field Independent individuals have a significantly higher level of SLA competence than Field Dependent ones. But eventually it is also revealed that Field Independence-Dependence as a cognitive style is not the only factor to consider or prioritize when teaching second language. In the study, it is shown

		that there are individuals who are competent in second language that are not a Field Independent individual.
Kunxue (2021)	Clausius Scientific Press	The study revealed positive but unspectacular results regarding the relationship between the two variables. The correlations attain significance, but do not indicate a major influence on second language learning success.
Wu (2018)	Theory and Practice in Language Studies	It is revealed that learners with higher Field Independence cognitive style tendency are more likely to acquire more second language vocabulary knowledge than those with Field Dependence cognitive style tendency.
Zhang and Wang (2015)	Modern Linguistics	It is revealed that correlation exists between field independence-dependence cognitive style and foreign language achievement.
Golaghaei (2011)	Advances in Language and Literary Studies	Field independent cognitive learners scored higher in understanding and productive vocabulary knowledge than field dependent style learners.
Zhang (2018)	Foreign Languages in China	Field independent cognitive style has more advantages than field dependent style in the process of formulaic language acquisition.
Fatemi and Vahedi (2014)	Theory and Practice in Language Studies	The results reveal that Field Independent learners outperformed their Field Dependent counterparts in EFL reading comprehension taught in a bottom-up group. Meanwhile, Field Dependent learners were more successful than the Field Independent ones when taught in a top-down group.
Sabet and Mohammadi (2013)	Theory and Practice in Language Studies	The results reveal that there is a relationship between Field Dependency/Independence and

			reading comprehension of EFL students.
Khodadady and Zeylani (2021)	International Journal of Linguistics	of	The results reveal that Field Independent students outperformed Field Dependent students in listening comprehension.
Motahari & Norouzi (2015)	Theory and Practice in Language Studies	in	The results reveal that FI students outperformed FD students regarding the quality of translation of a literary text.
Naraghipour and Baghestani (2018)	International Journal of English and Education	and	Data analysis showed that there were significance differences between field-dependent and field-independence learners in memory, cognitive, compensation, affective, and social in their language learning strategy.
Amiry and Mall-Amiri (2015)	International Journal of Language Learning and Applied Linguistics World	and	The results reveal that there was a statistically significant relationship between Field Independence and reading comprehension of ELF learners.
Farsi, et al. (2014)	International Journal of Language Learning and Applied Linguistics World	and	The results indicate that there was a positive relationship between FI and language proficiency of the participants.
Rostampour and Niroomand (2014)	International Journal of Education & Literacy Studies	&	The results revealed that there was a credible and meaningful relationship between field dependence/independence cognitive styles and total vocabulary knowledge.
Sheykhi and Mohammadi (2016)	Journal of Language and Translation	and	The results revealed that field independent learners outperformed field dependent learners in reading comprehension.

CONCLUSION

Multiple article journals that are shown in this research show the majority of positive relationships between Field Independency and Field Dependency and language acquisition/language learning. It is said that Field Independent language learners are more benefitted than their Field Dependent counterparts. Several studies revealed that Field Independent individuals tend to score higher in vocabulary knowledge; this leads to conclusion that Field Independent learners may be a better language learner and have a bigger success in their second language learning. Further studies may be needed to investigate more of relationships between Field Independency-Dependency and SLA.

REFERENCES

- Brown, H. D. (1994). Affective variables in second language acquisition. *Language Learning*, 23, 231–244.
- Carter, E. F. (1988). The relationship of field dependent/independent cognitive style to Spanish language achievement and proficiency: A preliminary report. *The Modern Language Journal*, 72(1), 21–30.
<https://doi.org/https://doi.org/10.1111/j.1540-4781.1988.tb04163.x>
- Chapelle, C., & Roberts, C. (1986). Ambiguity tolerance and field independence as predictors of proficiency in English as a second language. *Language Learning*, 36(1), 27–45. <https://doi.org/https://doi.org/10.1111/j.1467-1770.1986.tb00367.x>
- Coffield, F., Ecclestone, K., Hall, E., & Moseley, D. (2004). Learning styles and pedagogy in post-16 learning: A systematic and critical review. *Learning and Skills Research Centre*. <http://hdl.voced.edu.au/10707/69027>.
- Cohen, V. L. (2001). Learning styles and technology in a ninth-grade high school population. *Journal of Research on Computing in Education*, 33(4), 355–366.
- Czizer, K., & Dornyei, Z. (2005). The internal structure of language learning motivation and its relationship with language choice and learning effort. *The Modern Language Journal*, 89(1), 19–36.
- Dornyei, Z., & Skehan, P. (2003). Individual Difference in Second Language Learning. In *The handbook of second language acquisitions*.
- Ellis, R. (2015). *Understanding Second Language Acquisition (2nd edition)* (2nd ed.). Oxford University Press.
- Governor, D. (1998). Cognitive styles and metacognition in web based instruction. *Retrieved October*, 30.
https://scholar.google.com/scholar?oi=bibs&hl=en&cites=6327046696643690856&as_sdt=5
- Hall, J. K. (2000). *Field dependence-independence and computer-based instruction in geography*. Virginia Polytechnic Institute and State University.
- Hanse, J., & Stansfield, C. (1981). The Relationship of field dependent-independent cognitive styles to foreign language achievement. *Language Learning*, 31(2), 349–367.

- Hayes, J., & Allison, C. W. (1998). Cognitive style and the theory and practice of individual and collective learning in organizations. *Human Relations*, 51(7), 847–880.
- Keefe, J. W. (1979). Learning Style: An Overview. In. In *Students learning styles: Diagnosing and prescribing programs* (pp. 1–17). Reston, VA: National Association of Secondary School Principals.
- Kinsella, K. (1995). Understanding and empowering diverse learners in the ESL classroom. In *Understanding learning styles in the second language classroom*. Heinle & Heinle.
- Maghsudi, M. (2007). The interaction between field dependent/independent learning styles and learners' linguality in third language acquisition. *Language in India*, 7(5).
- Messick, S. (1984). The nature of cognitive styles: Problems and promise in educational practice. *Educational Psychologist*, 19(2), 59–74.
- O'Brien, T. P., Butler, S. M., & Bernold, L. E. (2001). Group embedded figures test and academic achievement in engineering education. *International Journal of Engineering Education*, 17(1), 89–92.
- Reid, J. M. (1995). *Learning styles in the ESL/EFL classroom*. MA: Heinle & Heinle Publishers.
- Saha, A. (2018). *Field independence and field dependence factor in SLA and their impact on second language acquisition*. Brac University.
- Witkin, H. A., & Goodenough, D. R. (1981). Cognitive styles: essence and origins. Field dependence and field independence. *Psychological Issue*, 1–141.
- Witkin, H. A., Moore, C. A., & Goodenough, D. R. (1977). Field dependent and field independent cognitive styles and their educational implications. *Review of Educational Research*, 47, 1–64.