

# Characteristics of the Acquisition Strategy a Pragmatic Competence of Bilingualism Children's

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## **Abstract**

The purpose of this study is to assess the acquisition strategy of pragmatic competence in Indonesian language of preschoolers. This study used a qualitative approach with a longitudinal study design. The instruments of this study are researchers as a key instrument in the form of guidelines supporting instruments of observation and electronic recording devices and field notes. This research data in the form of oral speech are taken with the technique of observation of eight subjects, consisting of children ages 2, 3, 4, and 5 years each was two people. Data were analyzed based performance analysis techniques. Based on data analysis findings that learning strategies in the acquisition of pragmatic competence that were used preschoolers are cognitive strategies and social strategies. Cognitive strategies used in preschoolers, among others, (1) imitation of speech, (2) the repetition of speech, (3) the use of speech patterns, (4) improvement of speech, and (5) translation. Social strategies used preschoolers are (1) the request for clarification and (2) the question-reciprocal response. The use of type and various types of learning strategies is influenced by several factors, namely age, level of mastery of language, bilingualism, the child's personality, communication objectives, and learning situation. In the process of acquisition of pragmatic competence use types and the variety of types of learning strategies that function is mastering the forms of speech used by a child to express a variety of purposes to the hearer.

**Keywords:** acquisition strategy, learning strategy, pragmatic competence, and the learning of children.

## **1. Introduction**

Child language acquisition is a process that occurs in the mental structure gradually. Each child is able to understand and produce speech after a process of internalization in their mental structure. This process can occur because since humans are born equipped with a default device in the form of abstract mechanism commonly called the Language Acquisition Device (LAD) (Chomsky, 1969).

LAD is a device that is both natural language acquisitions. With this device language acquisition in children can occur as the psychological development. Environment plays an important role to provide data such as input language. According to this McNeil (in Baradja, 1990) suggests that the process of language acquisition is influenced by environmental factors, but the essence of the derivation process itself is inner directed. Thus, language acquisition because of their heredity and environmental factors that give feedback to the child.

The view that language acquisition is influenced by environmental factors and language LAD known as interactionism views. Furthermore, this view is used as a frame of reference in this study. Based on this view of language acquisition process occurs because of the role of psychological factors and social factors. According to Clark and Clark (1977) and Ambridge and Lieven (2011) existence innate mechanism allows a person to learn the language. However, one cannot obtain language without any exposure (input).

In order to mastering the specific language as a tool to communicate with others, children experience language acquisition process by entering exposure to the language of the environment into mental structure. For example, children should have a pragmatic competence if it has incorporated aspects of the pragmatic competence in mental structure. Acquisition of pragmatic competence of children is marked with Reviews their understanding and production of speech. Certain forms of the which is used to express purpose in accordance with the context of use in Certain construction.

In the process of acquisition of pragmatic competence are important factors that need to be considered, namely the child's efforts to obtain other forms of speech are acceptable for the stated intention to communicate it when interacting with the hearer. In this regard, the experts (Corder, 1980; Tarrone, 1980; and Ellis, 1987) states that in communicating with the language being learned someone trying to use a variety of strategies to mastering forms of speech that was needed to express purpose and achieve success goal communication is desired. Furthermore, Ellis (1987) asserts that the use of language acquisition strategies, there are three mental processes that occur in the learner, which is the process of how learners acquire the language input and internalize it, produce it and communicate it. The third process is referred to as a learning strategy, production strategy, and communication strategies. Learning strategies are the way they process the input language to develop language knowledge. The use of learning strategies can occur consciously and can be observed, for example, memorization or repetition with the aim of remembering. However, it can also happen subconsciously. Production strategy is the effort learners use language knowledge they have acquired efficiently, which includes the process of planning what to say, plan the message, devised a series of sentences and words, and say it. The communication strategy is the child's efforts to use the language they have learned in communication.

In line with the objectives of this research, acquisition strategies which will be studied further are learning strategies and communication strategies. It is based on the consideration that the use of both strategies plays an important role in supporting the process of mastering certain forms of speech and language acquisition input more meaningful to improve language skills. The production strategy is a strategy of using language that is included in the communication strategy.

The study of learning strategies is one of the studies of language acquisition process. This study is interesting to be done in line with the shifting orientation study of language acquisition. In the beginning of language acquisition study focused on what has been mastered language learners which are the result of the study of language acquisition. Furthermore, the study was extended to the study of how learners acquire the language which is the study of language acquisition process.

Learning strategies used by children to achieve specific objectives embodied in various types. The use of a child's learning strategy is evident in the actions or behaviors of special done by children to improve language skills, for example by imitating, repeating, transfer into other languages, improving speech, asking for clarification, and others. For example, children repetitions because there is something to keep in mind how it is used. These actions occur naturally and can be observed in the behavior of a child's language when interacting with partners he said. According to the Oxford (1990), the behavior is influenced by several common characteristics, such as the development of age, language abilities, and the psychological state language learners.

As the speakers who have not mastered the language perfectly, the process of acquisition of pragmatic competence of children supported by the use of language acquisition strategy that includes learning strategies and specific communication strategies. Based on the categorization of pragmatic competence proposed by Bachman (1990), the acquisition of pragmatic competence of children

includes aspects illocutionary competence and sociolinguistic competence. Illocutionary competence is reflected in the ability of children to put forward specific purpose to the hearer, namely to clarify the facts, asking the facts, stated counsel, expressed gratitude, stating the request, Stating sorry, expressed opposition, express their opinions and give advice, and others. While the sociolinguistic competence shown in the sensitivity of children to use forms of speech that is appropriate to the context. Thus, the acquisition strategy of pragmatic competence child looks on the ways used by the child to master the forms of speech used to express specific purpose to hearer according to the user context.

Based on these ideas, the acquisition of pragmatic competence of children to be realized in speech acts in communication, which is manifested in illocutionary competence. Illocutionary competence is shown in the speech of children with certain characteristics. A pragmatic aspect in the speech act is what is the real form of the use of language in a variety of communication events. A review of how the acquisition of competencies pragmatics in speech act is also based on the view that the communication unit language is not in the form of symbols, words or sentences, but rather a symbol of production, word, or phrase that is realized in speech acts (Mey, 1993: 110; Schiffrin 1994: 54; and Duranti, 2000: 45). Another consideration the need for assessment of pragmatic competence acquisition strategy is the fact that the child learners who made this research subject have had the ability to produce a complete speech (Foster, 1990). In the previous research, this among other things made by Ghozali (1998), and Arifin (2000), argued that preschool children have been able to use speech as varied and meaningful. Based on these facts Researchers are encouraged to conduct this research by using subject of child learners the acquisition of pragmatic competence in Indonesian language.

Preschool children were used as research subjects are children ages 2, 3, 4, and 5, the bilingual Java-Indonesia. The use of language in communication, both Indonesian (BI) as well as the Java language (BJ) by preschoolers is the fact of the phenomenon of power of BI and BJ preschoolers. The use of language consistently by the children showed their mastery of two languages phenomena obtained simultaneously. This occurs because since the beginning of child language acquisition has been using both languages in everyday interaction. In other words, early child has become bilingual because of the social environment condition them to mastering rules of use of BI and BJ in everyday conversation. According to Laughlin (1978) when children acquire two languages before the age of 3 years, children acquire language was considered simultaneously. Thus, in this study examined the process of acquisition of BI as a first language (B1) obtained simultaneously with BJ child.

Previous research related to research is language acquisition of bilingual learners that conducted by Nowak-Fabrykowski and Shkandri (2004). In the context of language acquisition that occurs informally Dunduan-Li (2004) studied the development of demand strategy by speakers in a domain environment work using the research subjects were immigrant languages speakers. Other studies conducted by the acquisition of pragmatic competence De-Paiva (2005), which examines the development strategy of the request in Portuguese as a second language. Mwinyulle (2005) also examines the acquisition of pragmatic competence of Spanish speakers. Meanwhile, Bellugi (2006) research on language acquisition in two groups of subjects with different genetic aspects. Research Lambert, Kormos, and Minn (2016) proved a correlation between repetition task utter monologues and smoothness of the use of a second language in the speech.

From a number of previous studies the following was stated specifications of this research both in terms of substance, methodology, and theory. First, this study focused on the acquisition strategy of pragmatic language competence Indonesia (BI) preschool children focused on learning strategies. Second, this research is done in the background of the use of natural language, namely the use of language of preschool children with various partners speech in everyday life. Third, this study was conducted in the context of bilingualism preschoolers, are bilingual Javanese - Indonesian obtained simultaneously from the beginning of their language acquisition. Goal of this research is to obtain a description and explanation of the use of pragmatic competence acquisition strategy that

includes the types, causes the use and function of the use of learning strategies and communication strategies by preschoolers.

In line with the above description, this research is to study about pragmatic competence acquisition strategy, which is focused on learning strategies to preschoolers. This study focused on the discussion of (1) the types, (2) factors, and (3) the function of the use of learning strategies and communication strategies in the acquisition of pragmatic competence of preschooler

## **2. Research Methods**

This study used a qualitative approach. The use of a qualitative approach is because by the time used to observe the subject, in this study used the draft longitude (longitudinal) with the subject of the age difference, among others, ages 2, 3, 4, and 5 years. In this way the researchers follow a subject within four months, which is observing a subject at a certain stage of language acquisition process to a different subject at that age.

Theoretical approach used in this study is the theory of pragmatics and language acquisition theories, especially theories of language acquisition strategies, namely language learning strategies. Pragmatic theory is used to understand the aspects of the pragmatic use of children in the activities of communication the which is the realization of competence pragmatics. Theories of language acquisition strategies used to assess, track, and identify strategies acquisition of pragmatic competence in using Indonesian, ie measures or ways do children in mastering the use Indonesian pragmatic competence of preschool children.

This research data is the speech of preschool children that are expressed in interaction with various hearer and field notes about the context of communication obtained from observations of researchers in the field.

The subjects were language speakers bilingual preschoolers Java language - Indonesian. The subjects were eight preschoolers, consisting of children ages 2, 3, 4 and 5 years respectively two people. Determination of the number of subjects based on the Walfram opinions (2004) that in psycholinguistic research subjects can be five to ten research subjects. Determining the subject of this study is based on the principle of the adequacy of the data required in this study. Eighth subjects used in this study has the following characteristics (1) the subject comes from a family environment bilingual Java-Indonesia with a background in social status are relatively the same, (2) the subject since childhood has been introduced to BJ and BI, namely children since its inception has been obtained BJ and BI as a language for everyday communication, and (3) subject residing in communities that use BJ and BI in everyday communication.

In this study, the researchers operated as a key instrument for data in this study of human behavior that can only be understood through the interaction between researchers with the subject and the factors that play a role in the subject communication activities. As an additional instrument used was the observation guidelines and tools in the form of electronic recording observations and field notes tool.

The data collection technique used is the technique of observation. The use of this observation is based on data collection techniques as did Rubin (1987) and Naiman et al. (1990) in the study of language acquisition strategies. A Techniques of observation in this study is done either by participating or non participation. The observations focused on the activities of the bilingual preschoolers Java language - Indonesian doing verbal interaction with various partners speech. Techniques are equipped with recording observations and field notes.

To achieve the objectives of this research, a variety of supporting data were analyzed based performance analysis techniques. This analysis technique is based on the idea of Larsen-Freeman and Long (1991), which suggests that this type of data analysis in the study of language acquisition include contrastive analysis, error analysis, performance analysis and discourse analysis. Performance analysis has been widely used by experts in the study of children learning strategies in early language

acquisition and research on recovery of form and function speech that the relevant use is used in this study.

Data conclusion is based on the analysis of learning strategies and communication strategies of preschool children who emphasized on the types, causes the use and function of their use in the acquisition of pragmatic competence. The results of the analysis of the data are abstracted into a temporary conclusion. To obtain the validity of the conclusions checking the validity of the research findings by checking data and theoretical by way of confirming the results of the data analysis and related theory described in the study of theory. The goal is to get the affirmation of the credibility of the research findings.

### 3. Result

Based on analysis of data on the use of learning strategies preschool children have characteristics shown in (1) the type and the variety of types, (2) factors, and (3) the function of their use in the acquisition of pragmatic competence. Overall use of this type of learning strategies and various types of preschool children in the acquisition of pragmatic competence shown in the following table.

**Table 1:** The Use of Learning Strategies in Pragmatic Competence Acquisition of Preschooler

| Subject     | Category           | Type Of Strategy               | Variation Type Of Strategy                                                                            | The Obtained Pragmatic Aspect                                                                                   | Explanation                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------|--------------------|--------------------------------|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Age 2 years | Cognitive Strategy | (1) Speech Impersonation       | (a) Impersonation for Speech Difficulties                                                             | <ul style="list-style-type: none"> <li>Stating Facts</li> </ul>                                                 | <ul style="list-style-type: none"> <li>The strategy used: two types of strategies, three variations of the type of strategy, and is used for mastering three aspects of pragmatics</li> </ul>                                                                                                                                                                                                                         |
|             |                    | (2) Speech Repetition          | (b) Repetition of his own speech<br>(c) Repetition Adults speech                                      | <ul style="list-style-type: none"> <li>Stating Facts</li> <li>Stating Requests</li> </ul>                       |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Age 3 years | Cognitive Strategy | (1) Speech Impersonation       | (a) Impersonation for Speech Errors                                                                   | <ul style="list-style-type: none"> <li>Stating Facts</li> </ul>                                                 | <ul style="list-style-type: none"> <li>The strategy used: 4 types of strategies, six variations of the type of strategy, and is used for mastering 7 pragmatic aspect.</li> <li>This type of strategy is not used: impersonation of speech because of the difficulty narrative.</li> <li>This type of strategy has not been used at an earlier age: use speech patterns and the request for clarification.</li> </ul> |
|             |                    | (2) Speech Repetition          | (b) Repetition of his own speech<br>(c) Repetition of Adults speech                                   | <ul style="list-style-type: none"> <li>Stating Facts</li> <li>Stating Advice</li> </ul>                         |                                                                                                                                                                                                                                                                                                                                                                                                                       |
|             |                    | (3) The use of speech patterns | (d) Use of Daily Life Pattern                                                                         | <ul style="list-style-type: none"> <li>Stating Thanks</li> <li>Stating greetings</li> </ul>                     |                                                                                                                                                                                                                                                                                                                                                                                                                       |
|             | Social Strategy    | (4) Request for clarification  | (e) Request the narrative back<br>(f) Requests Explanation of Intent                                  | <ul style="list-style-type: none"> <li>Stating Facts</li> <li>Stating Facts</li> </ul>                          |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Age 4 years | Cognitive Strategy | (1) Speech Repetition          | (a) Repetition of his own speech<br>(b) Repetition of Adults speech<br>(c) Repetition of Peers speech | <ul style="list-style-type: none"> <li>Stating Facts</li> <li>Stating command</li> <li>Stating Facts</li> </ul> | <ul style="list-style-type: none"> <li>The strategy used: 4 types of strategies, 8 variations in the type of strategy, and is used for mastering 8 pragmatic aspect.</li> <li>This type of strategy is not used: impersonation of speech.</li> <li>This type of strategy has not been used at an earlier age: translation.</li> </ul>                                                                                 |
|             |                    | (2) The use of speech patterns | (d) The use of speech Daily Pattern<br>(e) Use of Creative Patterns                                   | <ul style="list-style-type: none"> <li>Stating Facts</li> <li>Stating Request</li> </ul>                        |                                                                                                                                                                                                                                                                                                                                                                                                                       |
|             |                    | (3) Translation                | (f) Translating Words/Phrases Java language into Indonesian                                           | <ul style="list-style-type: none"> <li>Stating opinions</li> </ul>                                              |                                                                                                                                                                                                                                                                                                                                                                                                                       |

| Subject     | Category           | Type Of Strategy                         | Variation Type Of Strategy                                                                                                    | The Obtained Pragmatic Aspect                                                                                               | Explanation                                                                                                                                                                                                                                                                                                                                                  |
|-------------|--------------------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             | Social Strategy    | (4) Request for Clarification            | (g) Requests narrative back<br>(h) Request for Explanation of Intent                                                          | <ul style="list-style-type: none"> <li>• Stating Facts</li> <li>• Stating Facts</li> </ul>                                  |                                                                                                                                                                                                                                                                                                                                                              |
| Age 5 years | Cognitive Strategy | (1) Speech Repetition                    | (a) Repetition of his own speech<br>(b) Repetition of Adults speech<br>(c) Repetition of speech itself                        | <ul style="list-style-type: none"> <li>• Stating Facts</li> </ul>                                                           | <ul style="list-style-type: none"> <li>• The strategy used: five types of strategies, 10 various types of strategies, and used to mastering 10 aspects of pragmatics</li> <li>• This type of strategy is not used: impersonation of speech.</li> <li>• This type of strategy has not been used at an earlier age: a question-reciprocal response.</li> </ul> |
|             |                    | (2) The use of speech patterns           | (d) The use of speech Daily Pattern<br>(e) The use of speech Creative Patterns                                                | <ul style="list-style-type: none"> <li>• Stating Thanks</li> <li>• Stating Facts</li> </ul>                                 |                                                                                                                                                                                                                                                                                                                                                              |
|             |                    | (3) Translation                          | (f) Translating Words/Phrases Java language into Indonesian<br>(g) Translation Sentence Phrases Java language into Indonesian | <ul style="list-style-type: none"> <li>• Stating Facts</li> <li>• Stating opinions</li> </ul>                               |                                                                                                                                                                                                                                                                                                                                                              |
|             | Social Strategy    | (4) Request for Clarification            | (h) Request narrative back<br>(i) Request for Explanation of Intent                                                           | <ul style="list-style-type: none"> <li>• Stating Facts</li> <li>• Stating Requests</li> </ul>                               |                                                                                                                                                                                                                                                                                                                                                              |
|             |                    | (5) The Questions of Reciprocal response | (j) QuestionThe response-Reciprocal                                                                                           | <ul style="list-style-type: none"> <li>• StatingQuestion</li> <li>• Stating Facts</li> <li>• Stating Conclusions</li> </ul> |                                                                                                                                                                                                                                                                                                                                                              |

Based on the exposure to the use of learning strategies to preschoolers in the table a picture that (1) children aged 2 years using two types of strategies, each of which is realized in 3 variations and types of strategies used to master 3 aspects of pragmatic, (2) children aged 3 years using four types of strategies, each of which is realized in 6 variations and types of strategies used to master the 7 aspects of pragmatic, (3) children aged 4 years using four types of strategies, each of which is realized in 8 variations and types of strategies used for control of 8 aspects of pragmatic, and (4) children aged 5 years using five types of strategies, each of which is realized in 10 variations and types of strategies for mastering 10 aspects of pragmatics. From this study illustrate the characteristics of the communication strategy used preschoolers at the age of 2, 3, 4, and 5 years. The results of the study and describes the development of pragmatic competence obtained preschoolers before they obtain formal language in school.

Based on the findings of this study the classification of the use of learning strategies preschoolers based on the classification of the experts described as follows.

**Table 2:** Classification the use of Preschooler Learning Strategies

| Category of Learning strategies                                       | Preschooler Learning Strategies | Classification of Learning Strategies for Experts                                                                                                                                          |
|-----------------------------------------------------------------------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Cognitive Strategies</i> (O'Malley and Chemot, 1990)               | Imitating of speech             | <ul style="list-style-type: none"> <li>• <i>Imitating</i> (Ninio dan Snow, 1996)</li> <li>• <i>Imitating models</i> (O'Malley and Chemot, 1990)</li> </ul>                                 |
| <i>Cognitive Strategies</i> (O'Malley and Chemot, 1990, Oxford, 1990) | Repetition of speech            | <ul style="list-style-type: none"> <li>• <i>Repetition</i> (O'Malley and Chemot, 1990)</li> <li>• <i>Repeating</i> (Oxford, 1990)</li> </ul>                                               |
| <i>Cognitive Strategies</i> (O'Malley and Chemot, 1990, Oxford, 1990) | Translation                     | <ul style="list-style-type: none"> <li>• <i>Translation</i> (O'Malley and Chemot, 1990)</li> <li>• <i>Translating</i> (Oxford, 1990)</li> </ul>                                            |
| <i>Cognitive Strategies</i> (O'Malley and Chemot, 1990, Oxford, 1990) | Usage patterns of speech        | <ul style="list-style-type: none"> <li>• <i>Use of Formulaic Expressions</i> (Chesterfield and Chesterfield, 1985)</li> <li>• <i>Using Formulas and Patterns</i> (Oxford, 1990)</li> </ul> |

| Category of Learning strategies                                                                                                                                           | Preschooler Learning Strategies  | Classification of Learning Strategies for Experts                                                                                                                                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Interpersonal Interaction</i> (Chesterfield and Chester-field, 1985)<br><i>Social Strategies</i> (Oxford, 1990)<br><i>Social Mediation</i> (O'Malley and Chemot, 1990) | Requests for Clarification       | <ul style="list-style-type: none"> <li>• <i>Requests for Clarification</i> (Chesterfield and Chesterfield, 1985)</li> <li>• <i>Clarification/Verification</i> (Rubin, 1987)</li> <li>• <i>Asking Questions</i> (Oxford, 1990)</li> <li>• <i>Questions for Clarification</i> (O'Malley and Chemot, 1990)</li> </ul> |
| <i>Social Strategies</i> (Oxford, 1990)<br><i>Social Mediation</i> (O'Malley and Chemot, 1990)                                                                            | The response question-Reciprocal | <ul style="list-style-type: none"> <li>• <i>Cooperating with Others</i> (Oxford, 1990)</li> <li>• <i>Cooperation</i> (O'Malley and Chemot, 1990)</li> </ul>                                                                                                                                                        |

The exposure of preschoolers learning strategies can be grouped into two categories, namely cognitive strategies and social strategies. Belonging to the cognitive strategies is an imitation of speech, repetition of speech, usage patterns of speech, speech improvement, and translation. As for belonging to a social strategy is the request for clarification and question-reciprocal response.

## 4. Discussion

### 4.1 Learning Strategies Types of Preschooler in Pragmatic Competence Acquisition

The types of learning strategies learners preschoolers realized in a variety of types and variations of the type that has characteristics different from learning strategies used by learners who learn formally in school. On learners who have studied at this school of learning strategies oriented to the efforts being made to improve the language skills after they followed the learning process. Assessment of learning strategies and their use in school-age learners has been done by experts, including Wenden and Rubin (1987), Stern (1983), O'Malley and Chemot (1990), Oxford (1990), Rubin and Thomson (1994) and Ellis (1995).As for the use of learning strategies on children's learning has not been much discussed. Thus, the findings of this study useful to provide an overview of the use of learning strategies children a description and explanation of the characteristics of (1) the type and the variety of types, (2) factors, and (3) the function of the use of learning strategies preschoolers.

Characteristics of use types and the variety of types of learning strategies preschoolers marked by three characteristics, which are used in an informal environment, used in the practice of communicating naturally, and do no deliberate intention to mastering of certain forms of speech. Based on these three things, the application of learning strategies to preschoolers shows their uniqueness. This uniqueness shows the peculiarities of preschoolers learning strategies compared with school-age children learning strategy conducted in a formal learning environment and made a conscious effort to control certain forms of speech. The specificity is shown in the use of the type and the variety of types of learning strategies in the acquisition of pragmatic competence.

First, imitation utterances made in two variations of types, namely imitation of speech due to difficulties because of the narrative and narrative errors. The child's behavior is done functionally, which is to meet the communication needs when the child cannot express the intent and when children make mistakes in declaring the intention to hearer. Impersonation of speech is not done spontaneously by the children, but at the request of partners he said. This is in line with the explanation Ninio and Snow (1996) that children imitate speech in the form of answers to questions they cannot answer and the parents ask children to mimic certain forms of speech are expressed. Impersonation speech this child, according to Barret (1981) and Dale (1980), is a form of interpersonal speech usage committed to mastering communicative purpose or pragmatic in early child speech.

Secondly, the repetition of speech do preschool children by conducting own speech repetition, repetition of speech of adults, and the repetition of speech peers. This behavior is characterized by the use of other forms of speech over and over again at every opportunity to communicate. In this way the child can test hypotheses about the mastery of certain forms of speech. From the use of speech

repeatedly in communication practices children can find out accuracy or inaccuracy form of speech it uses until it can use automatically.

Third, the use of speech pattern made in the form of everyday speech patterns and patterns of creative speech. By using speech patterns of children do not have to think about the vocabulary and structures that will be used for speech patterns are expressions that are commonly used as it is without changing the content and structure of the speech. The use of this strategy is beneficial for children to learn to master certain forms of speech and understand the habits or manners with regard to how to express gratitude, greetings, and others in accordance with the cultural background of the people. The use of speech pattern is obtained based on the input of children exposed to him in his language and usage environment is functional in everyday communication practices.

Fourth, improvement of child utterances made in two ways, namely the improvement of their own speech and speech improvement based on responses hearer. This strategy is used for children's awareness of errors in the spoken speech. The awareness gained by understanding the child's own child or based on responses hearer. Understanding own child to errors in speakers Obtained by the knowledge and experience of language and its ability to perform self-monitoring for conducting activities to communicate and their negative response in the form of correction of the hearer. In addition, preschool-aged children are not uncommon asking partners to improve speech he said that they produce.

Fifth, the translations are performed child in two ways, namely the translation of the word / phrase java into Indonesian and Javanese language sentence translation into Indonesian. In this way the child can produce utterances in a "new language", ie creative utterances produced children who are not the same as the structure of the target language Indonesian as well as other languages Java language competence. According to the Oxford (1990) by translating the child can use the language as a foundation for understanding speech or produce different creative with the rules of the target language.

Sixth, the request for clarification made by asking hearer to explain again and explanation purposes other forms of speech that are not understood.

Proficiency in requesting clarification owned subsidiary based exposure forms clarifying questions and questions to revise the speech obtained in speaking environment in practice communicating naturally occurring. Child requesting clarification as do parents, sister, and other speakers around when doing similar behavior both to him and to the other speakers.

Seventh, the question-response reciprocal use of preschool children at the age of 5 years. These types of strategies used by working with the speaker who is considered to have mastering Indonesian language well. Children's activities are driven by the desire to interact and to establish social closeness with the hearer. At preschool age children this type of strategy is in the form of questions and answers alternately with the hearer. By asking the things he wanted to know the child can learn the forms of speech to declare the question. Conversely, by answering questions can learn to express answers to the questions submitted to him.

## **4.2 Factors that Cause the use of Preschooler Learning Strategies InAcquiring Competence in Pragmatics**

The use learning strategies in the process of acquisition of pragmatic competence of preschool children are caused by various factors, namely the development of the age, the level of mastery of language, bilingualism, personality, and the intensity of the input and interaction. Some of these factors are outlined below.

The influence of the age of the child to use learning strategies in the acquisition of pragmatic competence demonstrated by differences in learning strategies used children in each age level. The higher the age of the child, learning strategies used increasingly numerous and varied. Thus the findings of this study support the findings of Dulay, Burt, and Krashen (1982) and Oxford (1990) that the development of age influence on the process of language acquisition. The findings of this study



also proves that the effect of age on language acquisition is not limited to the acquisition of phoneme, morpheme, and sentences, as evidenced Dulay, Burt, and Krashen (1982) and by previous researchers but also on the acquisition of competencies proven pragmatics.

The level of language proficiency of children plays an important role in the selection and use of this type and the variety of types of learning strategies. One aspect that supports children's language levels is a long time to learn the language. According to Hatch (1983) and Ellis (1986) a long time to learn the language can support this level of mastery of the language, particularly on the success in mastering communication competence. Older children learning time is determined by the starting time to learn the language. According to Kent and Miolo (1996), through the channel of intrauterine child has been exposed to human language since she was a fetus. Preschoolers a long time learning the language known by differences in their starting time to learn the language, which is in accordance with the child's age. From the findings of this study obtained a description that the different language levels resulted in differences in the type and characteristics of the various types of learning strategies used children at each year of age, although there are some similarities (see table 5.1). These facts illustrate the development of the acquisition strategy of preschool children in line with the level of mastery of the language, especially the pragmatic competence.

From this study, it was found that pragmatics competence development of preschool children are developmentally appropriate children's language. According to Piaget (1965) stages of language development of children includes six stages: (1) the stage of the babble first (prelinguistic), (2) the stage of the babble second (words of nonsense), (3) the stage of linguistics I: sentence one word, (4) the stage linguistics II: two-word sentences, (5) phase III linguistics: grammar development, (6) the linguistic stage IV: pre-adult stage, and (7) the stage of linguistic V: full competency. Suitability of pragmatic competence development of preschool children with developmental stages of children's language appears on the use of speech to express a variety of purposes to the hearer. For example, children aged 2 years state the facts in the form of speech of the word, are (1) *a doctor* to certify Haekal will go to the doctor, (2) *Uti* to declare the word *grandmother* was sick, and (3) heads to state *grandmother* has headache (see the data H2.A1.1). The speech showed that children aged 2 years using one-word sentences.

This is in line with the stages of language development of children aged 2 years; the child is at the stage of Linguistics I (sentences one word). With the speech in one sentence the word child can express a variety of purposes to the hearer. According to Dale (1977) speech of children raised in a sentence one word can have more than one sense of the word part because it is the expression of complex ideas, which in adults is expressed in complete sentences. Factors bilingualism learner plays an important role in the use of learning strategies preschoolers. This was evident in the use of learning strategies that are based on other languages, namely BJ. Relatedness factors bilingualism children with learning strategies indicated by the use of translation strategies, both translations word / phrase BJ into BI BJ and translating sentences into BI. In this way the child can take advantage of BJ as a foundation for understanding or produce creative speech which is different from the existing rule in BI. The use of this translation shows that preschoolers have the ability to use learning strategies that are categorized as *interlingual* strategies.

Personality of the child to give effect to the use of learning strategies, especially the child's personality that is openness. With a child's personality which is open children tend not afraid to make mistakes and not be embarrassed to ask when experiencing difficulties. According to Ehrman and Oxford (1989) with this open personality learners tend to learn better in terms of interpersonal communication skills. Other personality aspects affecting the use of learning strategies preschoolers are their child's confidence will be the function of language (Wenden, 1987). For preschoolers that belief has existed in him in line with the need to interact with others. In order to meet those needs children practice communicating naturally with various partners speech in the speech community who learned the target language. This is reflected in the strategy of the request for clarification and question-reciprocal response that are used functionally in communication practices.

The role of feedback and interaction intensity factor in the acquisition of pragmatic competence of preschool children looked at the use of all types and the variety of types of learning strategies. Some good learning strategies imitation of speech, repetition of speech, usage patterns of speech, translation, request for clarification, as well as reciprocal response questions are used preschoolers are affected by the interaction of environmental input and language. It's just that it affects the level of input factors and the interaction on the use of each of these learning strategies are not the same. Krashen (2003, 2011) proved that someone acquire language and develop literacy especially how to understand what is read and heard, that is when they get feedback to understand (Krashen, 2003; Jarvis and Krashen, 2014).

For example, speech imitation by children under two ways, namely because of the difficulty narrative speech imitation and mimicry speech the fault narrative. The forms of speech that imitated the child is an adult speech or the speech of the people around. Impersonation speech because of the difficulty narrative performed after the child received speech input forms not yet known, while

Impersonation speech the fault narrative performed after the child received the input of corrections to the forms of speech that improper use. All of the child's behavior in the imitation of the speech occurs in interactions that occur naturally. In the process of the interaction of a child can do many things, including impersonation of speech, to improve pragmatic competence. This is consistent with the statement Jucker (1998) that the pragmatic use of language is the study of the interaction between speaker and hearer.

Repetition speech committed by children against forms of speech that has not been controlled by the child. These types of strategies used in three variations, namely the repetition of his own speech, repetition adult speech, and repetition peers speech. Repetition of the speech shows that preschoolers have received language input from the environment and can practice it in interaction according to the user context. This is in line with the findings of Newman, Ratner, and Rowe (2014) there is a clear association between total input language that is given to children and the acquisition of their vocabulary.

Usage patterns of speech that is widely used preschoolers are patterns of everyday speech. This speech pattern is commonly used in everyday communication. This suggests that the child's language environment has an important role in the use of this type of strategy. Since the beginning of language acquisition, the child can use the speech patterns of daily life often spoken by people around him. By using patterned forms of speech from an early age, children can precipitate the acquisition of the language so that it can master it well. Exposure forms of speech patterns this daily is the right step so that children can easily accept the utterances of exposure and can immediately put it into practice in communication. This proves that the input and interaction factors support the process acquisition of pragmatic competence of children. These findings support the notion Rowe, Voigt & Masich, (2009) that there are significant vocabulary of parents of children who were exposed in the daily interaction to language acquisition.

### **4.3 The use Functions of Preschooler Learning Strategies in Pragmatic Competence Acquisition**

The use learning strategies to preschoolers its function is mastering the forms of speech to express a variety of purposes to partners he said, are forms of speech (1) to state the fact, (2) state the question, (3) states the request, (3) state counsel, (4) expressed gratitude, (5) states greetings, (6) states the order, (7) declared beg, (8) express their opinions and (9) stated conclusions. The function of the use of learning strategies that is different at every level of preschool age children.

In children 2 years of age, the use of learning strategies used to mastering the forms of speech to declare the fact and declare the request. In children 3 years of age use learning strategies its function is mastering a narrative forms to state the fact, stated counsel, expressed gratitude, and expressed greetings. In children aged 4 years, the use of learning strategies to function as mastering narrative forms to state the fact, stating the request, stating the order, stating the facts, stating begging, and express opinions. In children aged 5 and use learning strategies to function as mastering narrative forms to state the fact, expressed gratitude, express an opinion, stating the request, stating the question, and stated conclusions.

Differences function use of learning strategies at every level of the child's age marks the effect of different socio-cultural and psychological maturity of children. The findings of this study prove the link between the process of language acquisition as psychological symptoms and as a socio-cultural phenomenon, especially in the acquisition of pragmatic competence. As psychological symptoms derivation of pragmatic competence necessary maturity child mental aspects to map and represent the pragmatic competence in the use of narrative form appropriate to the context of use. As a socio-cultural phenomenon, the acquisition of pragmatic competence children learns the principles of the use forms of speech in accordance with the socio-cultural norms so as to produce a speech thanking the community. This marks the characteristics of pragmatic competence acquisition as a process of social and cultural development, namely the development of a set of knowledge required to achieve interpersonal needs with language media.

Characteristic functions use learning strategies that preschooler implies tasks that need attention by educational practitioners. Education practitioners preschoolers need to pay special attention to the development and maturity of the child cognition in order to introduce forms of speech and its use is appropriate for children to develop pragmatic competence. This is in line with the results of the study Rowe, (2015) that there is a relationship between the input and the intake, namely the provision of language input affect the development of children's language. This is also supported by the opinion of Schwartz (2015), that there is the impact of input language on child language acquisition.

Some things you can do education practitioners preschoolers are (1) the creation of a conducive learning environment, (2) the provision of proper exposure, and (3) providing the opportunity to communicate to the child practice. The creation of a conducive learning environment can be provided in the form of exposure and the opportunity to communicate practices that suit the needs of children. Exposure giving forms of speech that is rich and varied in accordance with the cognitive development of children is required to support a child's ability for mastering the forms of speech used to express purpose in accordance with the context of its use. This provision is necessary to communicate the practice of children as a means to maximize the developmental competence of pragmatics children through the process of interacting naturally.

## **5. Conclusion and Recommendations**

### **5.1 Conclusion**

Strategic acquisition of pragmatic competence of preschoolers realized in the process of mastering the forms of speech to express purpose and the process of how to communicate to the hearer according to the user context. The acquisition strategy is characterized by two things, namely how children acquire certain forms of speech to make the point to the hearer and how children communicate in interaction. Both the child's activity is a strategy known as a language learner learning strategies and communication strategies. Learning strategies are the ways used by children in the form of mental and behavioral activities to improve pragmatic competence. The use of learning strategies in their respective age levels of preschool children have different characteristics, although there are some similarities. Characteristics of the use of learning strategies are seen in type and the variety of types, causes, and the function of the use of learning strategies in the acquisition of pragmatic competence.

Learning strategies used to preschoolers in two categories, namely cognitive strategies and social strategies. Cognitive strategies used preschoolers into several types, namely imitation of speech, repetition of speech, usage patterns of speech, speech improvement, and the Java language speech translation into Indonesian. Some types of learning strategies are used by children because they have not mastered the forms of speech right to make the point needed in communication. Various learning strategies its function is mastering the forms of speech which is newly introduced to him, achieve the automation of the use of forms of speech to be mastered, helps build confidence, and increase the understanding and production of speech in Indonesian, and generates a message in Indonesian based forms that they have learned in the Java language.

Social strategies used by the child in two types, namely the request for clarification and question-reciprocal response. The request for clarification by children under the form of requests narrative back and explanation purposes. Requests the narrative back to work to understand and check or ensure that he has understood the specific form of speech well. The request for explanation purposes because children aware of an error in speech and wanted to get a correction in the form of an explanation of the purpose hearer. This method serves to obtain a direct justification of the errors that have done so that the child can use the correct form of speech on other occasions. Strategy-response question of reciprocity is done because the child intends to cooperate with the hearer in the form of activity to ask and answer. Question-reciprocal response is only used to preschoolers at the age of 5 years. This indicates that by age 5 occur in the child's developmental capability utilizing social strategies in the process of acquisition of pragmatic competence. The use of various social strategies that reflects the efforts done by children to solve problems of communication is a natural fit with the communication needs of children in the process of interaction.

## **5.2 Recommendations**

Based on the findings of this study, the following put forward suggestions for the next educational practitioners and researchers as follows.

Teachers at the Playground or kindergarten need to recognize the cognitive development of children and the use of other forms of child utterances that represent pragmatic competence. In this way the teacher can give you exposure to other forms of speech in which a rich and varied according to the cognitive development of children so it can support the child's ability for mastering the forms of speech used to express purpose in accordance with the context of its use. Teachers need to understand that the child's mastery of pragmatic competence rooted in their experiences and impressions gained child to the condition, behavior and phenomena in the surrounding which can be observed in concrete by children. That understanding can maximize its role to create a learning environment that is conducive to the development of pragmatic competence of children. This can be done by making adjustments in the lesson plan, pay attention to the condition of students, facilities, and media language learning, as well as maximizing the provision of opportunities for children to practice communicating.

In this research study about pragmatic competence acquisition strategy by using device longitude (longitudinal) in preschool children at ages 2, 3, 4, and 5 years. To obtain more comprehensive research is recommended on the next researcher to assess the development of children's language acquisition strategy by using the subject at age 2 to 5 years.

From the analysis of the data in this study it was found that the influence of the environment and culture of the acquisition process of pragmatic competence of preschoolers. The influence of the environment and the culture will be interesting if studied further ethnographic studies using models of communication and acculturation models. Therefore, the results of this study recommended for the next researcher to study further the study focuses on the influence of the environment and culture of the acquisition of pragmatic competence of preschoolers.

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## **Individual's Waste Disposal Practice in Urbanizing Cities: The Case of Hanoi City, Vietnam**

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### **Abstract**

This paper is to provide a descriptive analysis of individuals' waste disposal practice in Hanoi, a crowded city experiencing rapid economic growth and urbanization. Data for this paper was collected from a self-reported questionnaire survey with 400 residents in Hanoi, and sixteen semi-structured interviews with both local authorities and residents. Results show that whereas most of residents in Hanoi were well aware of how important proper waste disposal was, and had opposing attitude towards others' fly tipping, many of them threw waste improperly at their convenience. While individuals' socio-demographic attributes were found to have quite weak relationships with waste disposal practice, a significant association between individuals' bond to community and their waste disposal practice was detected in this study, showing that the more residents are bonded to the community, the less likely they will discard waste improperly.

**Keywords:** Waste disposal behavior, social bond, developing countries, urbanization, attitude towards improper waste disposal, awareness, reaction to fly-tipping.

### **1. Introduction**

Within a few decades since Economic Reform (Doi Moi) was introduced in 1986, Hanoi city, the capital of Vietnam, has been experiencing unprecedented rapid urbanization and industrialization along with economic growth (Ho and Shibayama, 2009). In its turn, urbanization and industrialization have brought about environmental issues totally unfamiliar for this agrarian society to deal with, of which urban waste management is one of the most striking problems (David Smith and Joseph L Scarpaci 2000). With nearly 5,000 tons of solid waste generated per day (2015) and an estimated increase of

waste by 15% in the next year<sup>1</sup>, the waste management challenge is even multiplied by the complicated population configuration of Hanoi, owing to the fact that various populations - such as experts, unskilled workers, students, traders - from nationwide are continuously converging to Hanoi, seeking for career and income opportunities. And while flocking to Hanoi city, they bring along with them their specific habits of waste disposal, making it more complicated for local civic bodies to handle waste management.

Of course, this is not a particular challenge Hanoi has to deal with during its urbanization, but a common challenge for urbanizing cities around the world. Research has documented that improper waste disposal commonly takes place in urbanizing cities due to both individual attributes and administration limitations, creating new threats to human health and environmental sustainability (Vij 2012, Anaman and Nyadzi 2012, Garg and Mashilwang 2015). Research has also evidenced that residents play an important role in waste management in cities (Hoffman and Muller 2001, Season 2010). Hence, a number of researches further examined individuals' awareness, their attitudes and behaviors in urban waste management (Aminrad et.al. 2013, Joseph 2006, Vu 1995). Some others focused on the association between public participation and waste management, while some others concentrated on the association between individuals' social-demographic attributes and their waste disposal habit (Bull et al 2010, Feo and Gisi 2010). Based on analyses of factors affecting individuals' participation in public issues, research showed that to have better waste management mechanism, government should motivate the public and engage them to waste collection and disposal (Bull et al 2010, Feo and Gisi 2010, Memon 2010, Nahman and Godfrey 2010, Ozkan 2010).

In the context of urbanization in Hanoi city, research has disclosed an ineffective urban waste management and identified factors influencing waste disposal behavior, in which individuals' awareness, attitude and their participation in community activities were also found crucial factors. In addition, Charles et al (2010) holds that Vietnamese culture restrains its citizens from actively participating in community activities, and hence Vietnamese people hardly spoke out their ideas in meetings, and hardly warned others not to throw waste improperly even though they believed that improper waste disposal was bad.

In a succession of earlier studies, this paper aims to describe city residents' waste disposal practice, including how they are aware of the importance of proper waste disposal, how they respond against others' improper waste disposal, and their own waste disposal behavior. This paper also tries to explore how social-demographic attributes and residents' bond to community relate to their waste disposal practice. The new contribution this paper brings to the existing literature on waste management issues is that it provides a more multidimensional description of individual waste disposal practice, and a detailed analysis of the association between that practice and different components of social bond.

## **2. Key Concepts and Measurements**

Waste disposal practice in this study was examined at the individual level, and no specific sort of waste was singled out. Waste, in this study, referred to any material thing that an individual wanted to discard, including both water and solid waste. Waste disposal practice was divided into three components: awareness, residents' attitude and reaction against improper waste disposal, and residents' waste disposal behavior.

**Awareness** refers to how residents acknowledge the importance of proper waste disposal and keep the environment clean. Survey participants were asked to score their acknowledgement on a bipolar 5-point scale, with 1 stands for 'completely unimportant' and 5 for 'very important'.

**Attitude** refers to how residents evaluate others' improper waste disposal, and was examined in two domains: feeling and reaction. Survey respondents were asked if they feel annoyed when they

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<sup>1</sup><http://www.moitruong.com.vn/moi-truong-sos/nhung-con-so-ve-rac-thai-14394.htm>

watch others discard their waste improperly in different locations differentially related to survey respondents' personal interest, namely areas around respondents' house, restaurants respondents are dining in, open market, and streets. In addition, this study also examined how residents *react* to other's improper waste disposal. Five ways of reaction were provided, in which one represented a negative response toward improper waste disposal (I do not care about others' fly tipping at all), one represented a somewhat neutral response (I feel annoyed, but no reaction made), and the others indicate a quite positive reaction (I will pick up the waste and throw it into trash bin by myself; I will gently remind s/he not to do that again; I will strongly warn s/he not to do so). All are dichotomous variables.

**Waste disposal behavior** refers to residents' way of discarding his/her waste. ('Do you often throw waste improperly?' 'Yes/no').

Besides providing a deep analysis of waste disposal practice of residents in Hanoi, this research also aims at exploring factors that affect residents' waste disposal practice. Two sets of factors were selected to examine in this study based on previous literature review and the purpose of this research, namely residents' socio-demographic attributes, and residents' social bond to community.

**Socio-demographic attributes** were examined in this study are age, gender, education (the level of education that survey participants finished), and place of birth (whether or not a resident was born in Hanoi).

**Social bond** is a concept drawn from Travis Hirschi's theory of social control. Travis Hirschi (1969), who specifically concerned about *why* individuals did not commit deviance, proposed that if an individual was bonded to his/her conventional society, this bond would restrain his/her tendency toward deviance since deviance might break the bond he/she valued.

Accordingly, it is hypothesized in this study that the more an individual is bonded to his/her living environment, the more likely that he/she will behave in a protective manner with regard to the environment. To be more specific, he/she will not be likely to throw waste improperly, and at the same time, tend to protest when seeing others throw waste improperly. The concept of social bond in this study is developed into three categories: **resident status** (permanent resident vs. temporary resident); **length of residence** (i.e. the number of years they have lived in Hanoi); and **participation in local organizations** (whether or not they participate in a provided list of local socio-political organizations in the area).

### 3. Research Methods

Self-reported questionnaire survey and semi-structured interviews were conducted to collect data for this study. A sample size of 400 residents living in three wards in Hoan Kiem District, namely Chuong Duong, Hang Ma and Hang Bai, were chosen randomly for the survey from the list of residents provided by local government, in which 300 are permanent residents and 100 temporary residents<sup>2</sup>. Data from the survey was used to provide a general picture of waste disposal practice by residents, and how this practice was formed in relation with residents' socio-demographic attributes and social bond to community. Univariate analysis was employed to describe frequency distribution, central tendency and dispersion of residents' waste disposal practice, including their awareness of the importance of proper waste disposal, their attitude towards improper waste disposal, and their waste disposal behavior. Bivariate analysis techniques as Chi-square test and Pearson's *r* were run to testify the association and trend between variables.

In addition, sixteen semi-structured interviews were conducted with local government officials, permanent and temporary residents in the research sites to gain more insight into the residents' attitude, awareness, and experience related to the issue of waste disposal, and how these attitude, awareness and experience were formed during their interaction with the social environment. The list of residents

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<sup>2</sup> According to Law on Residence in Vietnam, permanent residents are those who have legal dwelling and uninterruptedly live there for at least one year.



interviewees was extracted from the list of survey respondents. Interviews took place in venues and at times convenient for the participants. On average, interviews lasted for about 45 -60 minutes.

All participants were reminded that all information they provided were used only for research purposes and kept anonymous, and participants were free to end their participation anytime on their will.

## 4. Results and Discussion

### 4.1. A General Picture of Waste Disposal Practice by Residents in Hanoi

#### *Residents' awareness of the importance of proper waste disposal*

Data shows that the majority of survey participants acknowledged the importance of proper waste disposal. Whereas 72.3% of participants claimed that proper waste disposal was very important and 24.5% important (in total 96.8% of participants are well aware of the importance of proper waste disposal), only 3.3% of them claimed that it is not really important or even unimportant at all. Standard deviation is at 0.587 (range=4), showing that residents are quite unanimous when assessing this issue.

As an explanation for why they think proper waste disposal is important, survey respondents claimed that improper waste disposal has negative effect on different aspects of human and community life.

**Table 1:** The negative effects of improper waste disposal on living environment according to residents' assessment

| The negative effects of improper waste disposal     | N   | Mean | SD   | Min* | Max* |
|-----------------------------------------------------|-----|------|------|------|------|
| Increasing environmental pollution                  | 400 | 4.73 | 0.62 | 1.00 | 5.00 |
| Damaging the looking of the city                    | 400 | 4.53 | 0.69 | 1.00 | 5.00 |
| Bringing more threats to public health              | 400 | 4.69 | 0.55 | 1.00 | 5.00 |
| Degradeing the civilization of the community        | 400 | 4.39 | 0.79 | 1.00 | 5.00 |
| Degradeing the image of Hanoi in the visitors' eyes | 400 | 4.53 | 0.73 | 1.00 | 5.00 |

(\*): 1.00 (Min) = no negative effect at all, 5 (max)= strong negative effect

With high mean values (more than 4.5 on a scale ranged from 1 to 5) and small values for standard deviation across all five items, data shows that residents commonly believe that improper waste disposal badly affect their living environment, and their assessments are quite unanimous, especially regarding the effect of improper waste disposal on environment pollution and threats to public health (highest mean values, lowest SD values).

#### *Residents attitude towards improper waste disposal*

It is found in this study that most of residents feel annoyed when they witness others dump waste improperly into environment, and the more the witness location is related to residents' personal interest, the more annoyed they feel. Witnessing improper waste disposal nearby their private houses brought up highest level of feeling annoyed (mean=4.66 on a scale ranged from 1 to 5) and lowest level of dispersion among 400 survey respondents (SD = 0.58), following by witnessing at the restaurant where respondents were dining in (mean = 4.55; SD = 0.76). The levels of feeling annoyed when respondents witnessed improper waste disposal at the other two locations less related to their personal interest as open markets and streets were relatively lower (mean = 4.11 and 4.13; SD = 0.92 and 0.85, respectively).

Interestingly, although most of respondents felt annoyed, their reacted to other's improper waste disposal very differently. While 17% of survey respondents said that they made no reaction because that was not their business, 50% of them chose to speak up to gently remind that person not to throw waste improperly, and 5.25% even dared to strongly criticize the improper behavior. Otherwise, more than 40% of respondents said that they would ignored that annoying behavior, showing a quite passive attitude towards improper waste disposal. Semi-structured interviews documented that the most

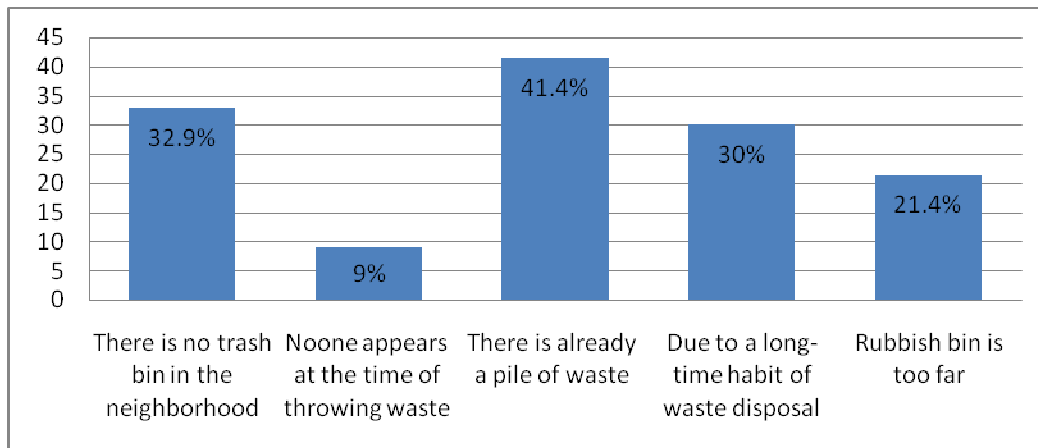
popular reason for that passive attitude is that respondents wanted to avoid conflict, and that their concern for environment was not strong enough to publicly raise their voice to protect environment.

*I did feel really annoyed when seeing others throwing rubbish improperly. However, I could not do anything. They will retort to me if I made any advice to them.”*  
(Male, 61 years old, factory worker).

**Residents’ waste disposal behavior**

Despite the fact that most of residents are aware of the importance of proper waste disposal, and feel annoyed when witnessing others’ fly tipping, more than half of them (52.8%) often throw waste improperly. The situational reasons respondents adduced to explain for that behavior are presented in the following chart.

**Figure 1: Reasons for improper waste disposal**



Most of respondents who often throw waste improperly, more than 40% of them do that because it is convenient for them (41.4% of respondents said because there was already a pile of waste, 30% because rubbish bin is too far. Nearly one out of three residents claimed that they would dump waste improperly because of the lack of public trash bin., and a equal rate because of a long-time habits. Only 9% said that they did so because there was no one there..

*“There is no rubbish bin around this neighborhood, so people often throw waste improperly, especially there is already an available pile of waste. It is hard to blame for any one. Even though s/he has a good responsibility for proper waste disposal, s/he cannot find any rubbish trash around him/her”* (Female, 42-year-old, businesswomen).

It is sometime the limitations of waste collection system made residents throw waste improperly. In some areas, there is no public trash bin for residents to throw their waste. Instead, a waste collector will come to collect waste a a fixed schedule per day, and hence it is quite normal that some household might miss that collection, so they might throw waste to environment, as illustrated by an interviewee:

*“In our neighborhoods, most of families are now working for governments, whereas waste collectors usually collect household waste at 4-5pm. Hence, households have to bring waste to an available pile of waste on streets because no one wants to keep waste inside their houses in 2- 3 days, even those waste are the ones they generate everyday”* (Male, 40-year-old, local government’s staff).

## 4.2. The Association between Residents' Waste Disposal Practice and Residents' Socio-Demographic Attributes and Social Bond

### *Gender and waste disposal behavior*

No difference between two gender groups was found in assessing the importance of proper waste disposal. Similarly, a majority of male as well as female respondents reported that they felt annoyed when seeing other people dump the rubbish improperly.

While there is no association between gender and attitude towards waste disposal, there is a slight difference between female and male respondents in the way they react to others' fly tipping. The rate of female respondents who pick up litter improperly disposed to drop in rubbish bin is higher than that rate of male respondents (22.5% and 14.5% respectively). The association between gender and this way of response is found significant ( $X^2=4.245$ ;  $df=1$ ;  $p<.005$ ).

Quite interesting, no association between gender and improper waste disposal behavior was found. The rates of male and female respondents who dumped litter improperly are quite similar.

### *Age and waste disposal practice*

There is no difference between age groups in assessing that proper waste disposal is important. However, different age group has slight different attitude towards others' improper waste disposal behavior (Pearson's  $r=.212$ ,  $p<0.001$ ). Respondents at higher age tended to feel more annoyed by improper waste disposal.

Not only difference in attitude, there is also a significant difference between age groups in the way they respond to others' improper waste disposal ( $X^2=23.988$ ,  $df=3$ ;  $p<.001$ ). Older people tend to be more willing to raise their voice to warn others if they dump litter improperly than their younger counterparts. On the contrary, younger people, although feeling annoyed, tend to keep silence at others' fly tipping.

Besides the above differences between age groups, this research also found a significant association between age and waste disposal behavior ( $X^2=31.464$ ,  $df=3$ ;  $p<.001$ ). More respondents at younger age reported they were willing to throw litter illegally if convenient than did people at higher age.

### *Education and place of birth*

Interestingly, no association was found between levels of education and waste disposal among survey respondents in this study. To be more specific, Chi-square test shows that being well or poorly educated has no relationship with individuals' awareness of and attitude towards the issue of waste disposal, as well as their choice of improper over proper waste disposal.

Since education indicates not only knowledge but also social skills, norms and values that one might perceive throughout his/her school-based socialization, this finding suggests a proposition that internal control mechanism (e.g. knowledge, norms, values), in this case, might be neutralized by situational factors, leading individuals to choose deviant behavior.

Similarly, we found no association between place of birth and residents' waste disposal practice. This finding is opposite to what we assumed before data collection. It was hypothesized at first that place of birth (whether or not respondent was born in Hanoi – the research site) would be, based on social control theory, related to individuals' illegal waste disposal in that being born in Hanoi would increase individuals' bond to Hanoi and, in its turn, stronger bond to Hanoi would decrease the frequency of fly tipping of an individual. However, no association between place of birth and individuals' attitude and behavior on improper waste disposal was found. Hence, it seems that individuals' linkage with their place of birth does not have any contribution to their bond to the community, at least in Hanoi.

### *Resident status*

There is no association between resident status and individual's awareness of the importance of proper waste disposal found in this study. Also, being a permanent or temporary resident has no association with the way individuals feel about others' illegal waste disposal behaviors. Most of the

survey respondents (nearly 90%) reported that they felt annoyed when seeing others throw their waste to the environment.

However, the difference between permanent residents and temporary residents appears when it comes to reaction against others' fly tipping. Whereas 53.3% of permanent residents in the research sites reported that they often raised their voice to warn others if he/she dump waste improperly, only 40% of temporary residents reported that reaction ( $X^2=5.333$ ;  $df=1$ ;  $p<0.05$ )

Consistently, the data shows a significant association between individuals' resident status and their decision to ignore others' fly tipping even though that behavior makes them feel annoyed ( $X^2=9.564$ ;  $df=1$ ;  $p<0.005$ ). To be specific, the rate of temporary residents who chose this passive way of response to others' fly tipping is much higher than of permanent residents (56% and 38.3%, respectively).

Not only associated with the way individuals react to others' fly tipping, resident status is also found to have significant association with their own waste disposal behavior ( $X^2=10.863$ ;  $df=1$ ;  $p<0.005$ ). Those who are permanent residents tend to avoid fly tipping more than temporary residents do. While only 48% of the former reported that they often threw litter improperly, 67% of the latter reported so.

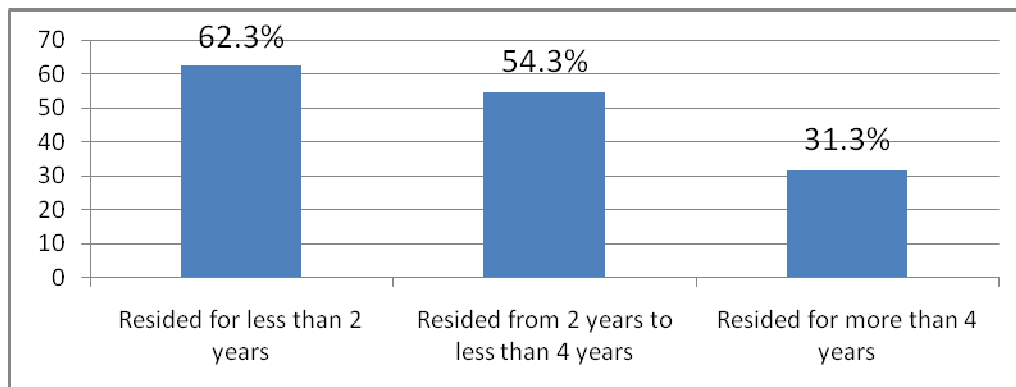
***Length of residence***

No significant association is found between individuals' length of residence and their assessment of the importance of proper waste disposal (most of respondents believe that proper waste disposal is important) and their attitude towards others' fly tipping (most of respondents feel annoyed when seeing others' improper waste disposal behavior).

If individuals' length of residence has no association with their awareness of and attitude towards improper waste disposal behaviors happened in their living environment, on the contrary, it is found to significantly relate to the way individuals behave. Individuals with longer time residing in community tend to be more ready to intervene improper waste disposal behavior ( $X^2=9.775$ ;  $df=2$ ;  $p<.01$ ). Whereas only 2% of survey respondents who have resided in the research sites for less than two years reported that they would warn other people if they threw litter improperly, 6.7% of respondents who resided from 2 to 4 years and 10.4% of those who resided for more than 4 years said they would.

A similar association was found between length of residence and respondents' improper waste disposal ( $X^2=25.203$ ;  $df=2$ ;  $p<.001$ ). As can be seen in Figure 2 below, the rate of respondents who admitted frequent improper waste disposal among those who has lived in Hanoi for less than two years is highest among all three groups (62.3%), whereas this rate among those who has lived in Hanoi for 2-4 years decreased to 54.3%, and among those who has lived in Hanoi for more than 4 years is even down to 31.3%.

**Figure 2:** The rate of residents who often dispose waste improperly by length of their residence in Hanoi



### ***Involvement in local organizations and individuals' waste disposal***

The relationship between this factor and individuals' waste disposal is, interestingly, somewhat different from the relationship between the former two social bond factors and individuals' waste disposal. Data shows a significant association between respondents who involve in local organizations and who do not in assessing the importance of proper waste disposal behavior ( $X^2 = 15.971$ ;  $df=4$ ;  $p < 0.005$ ). However, no association between individuals' involvement in local organization and their attitude towards fly tipping. Whether or not they participate in local organizations, respondents generally feel annoyed when seeing other threw waste improperly.

Regarding reaction against others' improper waste disposal, we found difference between two groups. The rate of those who raised their voice to intervene fly tipping among respondents who participated in local organizations is much higher than among those did not (67.3% and 47.4% respectively;  $X^2 = 7.162$ ;  $df=1$ ;  $p < .01$ ). Correspondingly, a significant association between being participated in local organization and choosing to ignore others' fly tipping was found ( $X^2 = 11.390$ ;  $df=1$ ;  $p < .001$ ). The rate of respondent who chose to ignore others' fly tipping among those who did not participate in any local organization about twofold that rate among those member of local organizations (46% and 21.2% respectively).

Also a significant association between participation in local organization and improper waste disposal behavior was found ( $X^2 = 7.886$ ;  $df=1$ ;  $p < 0.05$ ). While only 34.6% of those who participated in local organizations admitted improper waste disposal, this rate among those not member of any local organization is as high as 55.6%.

However, we found no association between individuals' attitude, awareness and behavior regarding waste disposal and their involvement in any particular local organization. To be specific, it is not important what particular organizations survey respondents are participating, as long as they are participating in *any* local socio-political organizations, they will be more likely to have positive awareness, attitude and behavior regarding waste disposal. This finding eliminates our initial hypothesis that specific norms and values of an organization had some effect on individuals' behavior including waste disposal, and highlights the importance of being bonded to the community.

## **5. Conclusion and Discussion**

In summary, data from this survey shows that individuals residing in Hanoi appear to have little care about environment protection regarding behavior. A majority of survey respondents reported that they frequently threw waste improperly. Besides, regarding their response to others' fly tipping, the rates of individuals who chose to ignore even though that fly tipping made them annoyed and those who did not care about others' fly tipping are somewhat high.

Even though respondents' behaviors showed little care about environment protection, their awareness appeared to be at a high level. Most of respondents highly appreciated the importance of proper waste disposal, and most of them had some certain knowledge of the environmental laws. In addition, respondents commonly expressed an opposing attitude against improper waste disposal behavior of other residents.

Regarding the association between socio-demographic attributes as gender, age, level of education, place of birth and waste disposal behavior, it was found that, except for age, most of socio-demographical attributes examined in this study has no relationship to individuals' waste disposal behavior. That means, whether or not an individual living in Hanoi is man or women, poorly or well educated, born in Hanoi or elsewhere is not related to whether or not s/he will throw waste improperly in his/her living town as Hanoi. However, his/her age is. The older an individual is, the more likely that he/she has a positive attitude and response to environmental protection by throwing waste properly and reminding others to do so.

Whereas socio-demographic attributes appear hardly related to waste disposal behavior, individual's bond to his/her community, examined via individual's resident status, length of residence,

and participation in local organizations, was found from moderately to highly related. Results showed that the more an individual bond to his/her community, the more likely he/she will have a positive attitude and reaction to protect environment. This finding suggests that, in order to promote proper and protective environmental behaviors, increasing one's belonging to his/her community is a good strategy.

Another remarkable finding of this study is that although residents in Hanoi are commonly aware of the importance of proper waste disposal, and have opposing attitude towards others' improper waste disposal, most of them often discard waste improperly. The question then is why such supportive awareness and attitude towards environment protection seem to have no effect on individuals' behavior? As awareness and attitude are internal control mechanisms, this finding suggests that the effect of internal control mechanism might have been neutralized by external conditions as urbanization and inefficient waste management system. Whereas inefficient waste management system provides situational conditions encouraging residents to throw waste improperly, rapid urbanization in Hanoi has loosened the bond of its residents to community, and hence free them to conduct behaviors harmful for environment.

The findings of this study suggest that further studies should be conducted in different research sites to compare and identify the conditions on which internal control mechanism (residents' awareness, attitude, and social bond to community) may be neutralized. This line of studying might boost our understanding of individual's behavior as a result of the interaction between internalized social norms and external situational factors, as well as provide evidence to improve the explanatory power of social control theory.

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