

**I DISAPPOINT YOU OR YOU DISAPPOINT ME:
L2 ACQUISITION OF ENGLISH PSYCH VERBS
BY CHINESE EFL LEARNERS**

Ai-li C. Hsin & Jia-yi C. Lin

ABSTRACT

English psych verbs behave differently from regular action verbs and thus typically cause a learning difficulty for a learner of a second or foreign language. While an action verb normally forms both an active and a passive construction, a psych verb entails restrictions. For a psych verb of type experiencer-theme (E-T), such as *fear* and *enjoy*, only an active construction is acceptable; for a psych verb of type theme-experiencer (T-E), such as *disappoint* and *surprise*, either an active or a passive construction is possible, but thematic structures differ. According to the Thematic Hierarchy, a passive construction with an experiencer subject is easier than, and thus becomes learnt before, an active construction with a theme subject. We examined whether this complication makes L2 acquisition of a psych verb different from, and more difficult than, a regular action verb, how psych verbs in the two subcategories are acquired by groups with varied proficiencies in English, and whether results of the current research conform to theories previously claimed by linguists. The results show that action verbs are easier than, and acquired before, psych verbs, and that, between the two subcategories, E-T verbs are acquired before T-E verbs. Among the participants in the three groups with varied English proficiencies, the advanced participants — graduate students with English as their major subject — performed best on verbs of all three types; intermediate participants who were senior students in secondary school, performed better than the beginning participants, i.e. junior students in secondary school, on the action verbs but not on psych verbs. Intermediate participants represented a transitional stage when learners undergo a period of confusing both psych verbs of two subtypes and the active-passive alternation in T-E verbs. L2 acquisition of English psych verbs by advanced and beginning learners reveals that the passive construction of T-E verbs is learned earlier than the active construction, in conformity with the prediction of the Thematic Hierarchy.

INTRODUCTION

Disappoint and other psychological verbs present a challenge to a Chinese EFL learner because this construction requires a learner to distinguish the positions in a sentence for the stimuli and the person who experiences a psychological state. In a sentence such as ‘I disappoint you’ or ‘you disappoint me’ the positions of ‘I’ and ‘you’ are crucial to whom the experiencer of the feeling is. Moreover, most psychological verbs in English have two representations to convey a similar meaning, as in sentences like *John’s words pleased everybody* and *Everybody was pleased by John’s words*. One has thus an option to place either the theme or the experiencer as the subject. In contrast, other psychological verbs such as *fear* and *enjoy* have only one form. The psych verb *fear* appears only in a construction *The child fears the dark* but not in **The dark fears the child*; analogously, the psych verb *enjoy* appears only in a construction *The child enjoys jazz* but not the reverse one.¹ This manifestation seems to indicate that psychological verbs comprise at least two types — theme-experiencer and experiencer-theme. Whereas in the former case one has a freedom of alternative constructions, in the latter case one has not.

Researchers of applied linguistics and English instructors have thus an incentive to improve and to expand their knowledge about what it is in the construction of English psych verbs that a Chinese EFL learner finds difficult. To improve our understanding of Chinese-speaking learners’ acquisition of English psych verbs, we address the following questions in this research.

1. Is a psych verb really more difficult for a Chinese EFL learner than a verb of another type such as an action verb?
2. Do psych verbs of subcategories experiencer-theme and theme-experiencer reveal disparate orders of acquisition by a Chinese EFL learner? Is the experiencer-theme psych verb learnt before the theme-experiencer psych verb in accordance with the Thematic Hierarchy?
3. How do Chinese EFL learners at varied levels perceive psych verbs of these subcategories? At what level of proficiency can a Chinese EFL learner master English psych verbs?
4. Is the passive construction of theme-experiencer type — e.g. *Everybody was pleased by John’s word* — easier for a Chinese EFL learner than the active sentence — *John’s words pleased everybody*?

5. Does the learning process demonstrated by Chinese EFL learners with different proficiency levels correlate with a specified linguistic theory?

LITERATURE REVIEW

As White (2003) defined, psych verbs are verbs that express a psychological state, such as *disappoint*, *surprise* and *upset*. In languages such as English, Spanish and Chinese, a psych verb typically requires a syntactic and thematic structure that differs slightly from that of other verbs, and thus poses difficulty for an L2 learner. Our purpose is first to provide an overview of ideas proposed by linguists and applied linguists of verbs in this group, and then, based on their findings, to explore the elements that influence Chinese EFL learners' acquisition of English psych verbs.

Classification of Psych Verbs

In English, psych verbs are all transitive; in Spanish and Chinese, however, there are both transitive and intransitive forms of psych verbs. Whitley (1995) proposed a classification of Spanish psych verbs; he distinguished between *direct* verbs, which has an experiencer as a subject (such as *I enjoy it*), and *reverse* verbs, which requires an experiencer as an object (such as *it interests me*) (Gascón, 1998). In Chinese, psych verbs are rarely used in the reverse way; and as Lai (2004) pointed out, transitive psych verbs are often associated with feelings that can be generated from within, while intransitive psych verbs are usually related to emotions that are caused by stimuli. In English, direct transitive and reverse transitive psych verbs represent two major classes. Table 1 below compares the classification of psych verbs in Spanish, English and Chinese.

Table 1. Classes of Psych Verbs in Spanish, English and Chinese

Language	Classes	Examples
Spanish	1. <u>Direct transitive</u> An experiencer acts as a subject, a cause as a direct object (e.g. Te deseo un buen dia).	<i>desear</i>
	2. <u>Direct intransitive</u> An experiencer acts as subject, and a cause serves as an ‘oblique object’ of a preposition specific to the particular verb (e.g. Su padre goza de Buena salud).	<i>gozar de/en</i>
	3. <u>Reverse intransitive</u> An experiencer is the indirect object, and a cause is cast as subject. The indirect object is optional: the experiencer might be generalized or impersonal (e.g. <i>La musica rock gusta en todas partes</i>).	<i>gustar</i>
	4. <u>Reverse transitive</u> A cause functions as subject; an experiencer acts as direct object (e.g. Este libro me fascina). (Classification as quoted by Gascón, 1998).	<i>fascinar</i>

Table 1. (continued)

Language	Classes	Examples
English	1. <u>Experiencer-theme verbs</u> An experiencer is selected as an external theta-role; a sentence of this type is deemed a direct transitive construction (e.g. <i>John cherished the gift</i>).	<i>cherish</i>
	2. <u>Theme-experiencer verbs</u> A role of experiencer is linked to an inherent accusative case, leaving only the theme free to move to a subject position (e.g. <i>The joke amused the host</i>) (Cupples, 2002).	<i>amuse</i>
Chinese	1. <u>Direct transitive</u> An experiencer acts as a subject, a cause as a direct object (e.g. <i>Wo214 ai51 xiao214 dong51-wu51</i>) ² .	<i>ai51</i> (‘love’)
	2. <u>Direct intransitive</u> An experiencer acts as a subject, the cause of the emotional state is not required (e.g. <i>Wo214 hao214 shi214-wang55</i>). Optionally, the cause can be added in via an ‘oblique object’ in dui phrase (e.g. <i>Wo214 dui51 ta55 hao214 shi55-wang51</i>).	<i>shi1-wang51</i> (‘disappoint’)
	3. <u>Reverse transitive</u> A cause functions as subject taking a clause complement in which an experiencer acts as subject in a direct intransitive form. (e.g. <i>Ta55 rang51 wo214 hao214 shi55-wang51</i>).	<i>Shi214/rong51...</i> <i>Shi55-wang55</i>

Terms

Although linguists discuss psych verbs, their terms to describe arguments and types of psych verbs seem to vary. In general, linguists use *experiencer* to describe ‘the individual experiencing the mental state’ and *theme* for ‘the content or object of the mental state’ (as quoted by Gascón, 1998). Whitley (1995) accepted the term *experiencer*, but preferred *cause* to replace *theme*. Sato (2003) also used *causative* and *non-causative* to distinguish psych verbs. Cupples (2002) used *theme-experiencer* verbs for which an experiencer is an object of an active clause, and *experiencer-theme* verbs or *standard* experiencer verbs for which an experiencer is the subject of an active clause. White (2003) adopted *experiencer subject* verbs for Cupples’s *experiencer-theme* verbs, and *experiencer-object* verbs for *theme-experiencer* verbs.

To avoid confusion, we adopt **theme-experiencer** verbs and **experiencer-theme** verbs to refer to psych verbs of two types in English. Furthermore, we use the term ‘**syntactic passive**’ to describe a passive sentence formed with an action verb — e.g. *The president was shot*, and ‘**adjectival passive**’ for a passive sentence containing a theme-experiencer verb — e.g. *The teacher was astonished*.

The Mapping of Arguments to the Syntax of a Psych Verb

For L2 learners of English, the alternation of argument structure between two classes of psych verbs is confusing, for example, in (1a) why is experiencer mapped to the subject position for *fear*, but for *frighten* in (1b) it is mapped to the object position.

1a. The student fear exams. (experiencer = subject)

1b. Exams frighten the student. (experiencer = object)

To provide a principle for the seemingly arbitrary alternation, a thematic hierarchy (Grimshaw, 1990) and a Uniformity of Theta Assignment Hypothesis (UTAH) (Baker, 1988) were proposed. The idea of a thematic hierarchy and UTAH is that at D-structure the argument structure for both classes of psych verbs is the same, and since experiencer ranks higher on the hierarchy, it is projected to a higher syntactic position. For theme-experiencer verbs like *frighten*, the theme was originally an internal argument but surfaced to the subject position

through movements (White, 2003).

Thematic hierarchy: Agent > Experiencer > Goal > Theme

UTAH: Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-structure (Baker, 1988)

Assuming the thematic hierarchy and UTAH, White et al. (1999) hypothesized that learners would resort to a default mapping strategy, mapping theme to the object position even when it is required to rise to the subject position in the S-structure. Consequently, errors are predicted to occur largely on misplacing experiencer in the subject position for theme-experiencer verbs, as shown in (2a). But errors of linking theme to the subject position for experiencer-theme verbs, as shown in (2b), would not be common.

2a. *The students frighten exams.

2b. *Exams fear students.

Pesetsky (1995), however, argued that the major difference between the two classes of psych verbs lies in ‘the presence of a cause argument’ (as quoted in White et al., 1999) in theme-experiencer verbs. With a higher layer of causative structure and a semantic derivation of verbs, cause (or theme) argument, thus, takes the more prominent position of subject than experiencer.³ Errors of (2a) occur because L2 learners cannot distinguish the causative nature of theme-experiencer verbs. In sum, both views mentioned above only prove that in English the mapping of experiencer and theme to syntactic position is not arbitrary, and that L2 learners do not link arguments to syntax randomly.

Conflation Parameter of Psych Verbs

Juffs (1996a, 1996b) discussed a difficulty that a Chinese EFL L2 learner commonly finds in English psych verbs. In (3a), the verb *disappoint* means that something caused the teacher to enter a state of disappointment; here CAUSE and STATE are conflated within one verb. It is also possible to express the causative separately, using the periphrastic verb *make*, as in (3b).

3a. The students' behaviour disappointed the teacher.
X CAUSE [Y GO [STATE]]

3b. The students' behaviour made the teacher disappointed.
(Examples taken from Juffs (1996a)).

In Chinese, the same verb, *disappoint*, cannot be expressed in the same way as (3a). (See (4a)). However, as in (4b), the periphrastic causative expression of the same meaning is grammatical.

4a. *na51 ben214 shu55 shi1-wang51 le0 Zhang55 San55.
That CL⁴ book disappoint ASP⁵ Zhang San.
'That book disappointed Zhang San.'

4b. na51 ben214 shu55 shi214/rang51 Zhang55San55
That CL book make Zhang San
hen214 shi55-wang51.
very disappoint.
'That book made Zhang San very disappointed.'

White (2003) explained that the conflation of semantic primitives CAUSE and STATE is not possible in Chinese, CAUSE and STATE cannot be conflated into a single verb, hence periphrastic causative is adopted. Nevertheless, this is not always the case. Table 2 shows that the conflation may be limited to a few words, but it is not impossible in Chinese.

Another problem with conflation of CAUSE and STATE in Chinese is that in some cases the sentence would result in ambiguity. As shown in (5), conflation is possible in *qi51* ('angry', 'upset'), it is difficult to determine the thematic roles of the two arguments, leading the sentence to be interpreted with opposite meanings. In short, Chinese allows the conflation of CAUSE and STATE, but to limited uses or lexicon. However, when theme appears in the subject position, mostly the causative construction without a verb conflation is taken.

5. Ta55 qi51 ta55 lao214 gong55.
she angry her husband
a. She made her husband angry.
b. Her husband made her angry.

Table 2. Possible Forms of Chinese Psych Verbs

	Transitive	Intransitive
Word order	EVT a. Wo214 hen214 ai51 dong51-wu51 I very love animal 'I love animals very much.'	EV a. Wo214 hao214 shi55 wang51. I very disappoint 'I am very disappointed.' b. Wo214 hao214 fan35. I very annoy 'I am very annoyed.'
		T + CAUSE + E + V a. Na51 zhi55 xiao214 mao55 shi214 wo214 That CL little cat CAUSE me xia51 yi55 tiao51. frighten 'That kitten frightened me.' b. Ta55 shi214 wo214 shi55 wang51. He CAUSE me disappoint 'He disappointed me.' c. Ta55 shi214 wo214 hao214 fan35. He CAUSE me very annoy 'He annoyed me.'
Causative morpheme		

Table 2. (continued)

	Transitive					Intransitive		
Conflation of CAUSE+STATE	TVE					TVE		
	a. Ta55	fan35	wo214.			a. *Ta55	shi55 wang51	wo214.
		He	annoy	me			He	disappoint me
		‘He annoyed me.’					‘He disappointed me.’	
	b. Na51	zhi55	xiao214	mao55	xia51	wo214		
		yi55	tiao51.					
		That	CL	little cat	frighten	me		
		‘That kitten frightened me.’						
E – Experiencer	V – Verb	T – Theme	CAUSE – Causative morpheme					

Despite the differences between English and Chinese psych verbs, they are not without similarity. Cupples (2002) reasoned that, in English, a passive theme-experiencer sentence resembled an adjectival structure and is more readily comprehensible than an active theme-experiencer sentence. A Chinese EFL learner may have difficulty with an active theme-experiencer sentence such as (3a), but he is expected to have less problems accepting passive theme-experiencer sentences such as (6) and (7), because the argument structure is the same in English as in Chinese.

6. Zhang⁵⁵ San⁵⁵ hen²¹⁴ shi⁵⁵-wang⁵¹
Zhang San very disappointed.
'Zhang San is disappointed.'

7. Jin²¹⁴-cha³⁵ gan²¹⁴-dao⁵¹ jing⁵⁵-ya⁵¹
The police feel surprised.
'The police are surprised.'

In conclusion, the major difficulties of a psych verb for a Chinese-speaking L2 learner of English derive from the mapping of arguments to syntax and from resetting the conflation parameter for English theme-experiencer psych verbs. According to the thematic hierarchy, an experiencer is invariably higher than a theme; a sentence with an experiencer-theme verb is thus less problematic than a theme-experiencer verb. In this review, the predicted result of the present work is on a par with White's (2003) account. The lack of a strong conflation parameter in Chinese intransitive psych verbs makes L2 acquisition of active theme-experiencer sentences difficult for Chinese EFL learners. Juffs's (1996a, 1996b) comparison between the usage of psych verbs in Chinese and English provides evidence for this learning problem, and concurrently indicates a question whether a passive theme-experiencer sentence, having an argument and syntactic structure similar to Chinese, is easier for a Chinese EFL learner to acquire.

To explore the relationship between the linguistic hypotheses stated above and stages of L2 acquisition, we investigated whether L2 learners' acquisition of psych verbs would improve as their English proficiency advance, and also which particular usages of psych verbs would remain problematic for an EFL/ESL learner as he progresses. The following section provides a description of how an experiment was designed and conducted to search for possible answers.

RESEARCH DESIGN

Types of verb and subtypes of psych verb

The objective of this experiment is to discover how a theme-experiencer verb, such as *worry*, an experiencer-theme verb, such as *enjoy*, and an action verb, such as *clean*, is acquired by Chinese EFL learners at various levels. A judgment of grammaticality is designed to test whether L2 learners with varied proficiency in English have distinct performances in grammaticality for action vs. psych verbs and for subtypes of psych verbs.

Our hypothesis is that

1. a psych verb is in general more difficult to acquire than an action verb,
2. an experiencer-theme verb is less problematic than a theme-experiencer verb, and
3. L2 learners do not distinguish the two types of English psych verbs randomly; they can better tell one type from the other as their proficiency level improves.

Method

Participants

In total, 101 Taiwanese learners of English participated in this experiment. Among them 39 were in their third year of junior high school, 40 in their third year of senior high school, and 22 in graduate studies with English as their major subject.

Materials

The test was comprised of three sentences containing experiencer-theme verbs (fear, enjoy and hate), three sentences containing theme-experiencer verbs (surprise, worry and disappoint), three sentences containing action verbs (play, clean and cook), plus three passive sentences of verbs from the above three types (admire, frighten and write). A total of 12 sentences were investigated in a grammaticality judgment task. To keep the sentence complexity within the level of junior high school participants, we limited the length of test items to seven words, with 3–6 words for active sentences and 6–7 words for passive sentences.

For each type of verbs an incorrect sentence was included. These sentences were constructed by misplacing the arguments, for examples, placing an experiencer in the object position and the theme in the subject position for an experiencer-theme verb (e.g. *Homework hated children*), placing a theme in the object position and an experiencer in the subject position for a theme-experiencer verb (e.g. *His father surprised his decision*), and reversing the position of an agent and a theme in the sentence with an action verb (e.g. *The room cleaned the old lady*). The order of sentences in the questionnaire was constrained to ensure an even distribution of item types throughout the list. The entire set of sentences is presented in Appendix A.

Procedure

Participants were asked to judge the grammatical status of the 12 sentences in the test. Their answers were limited to three options — grammatical, ungrammatical, or unsure. No limit of duration was applied to the task. Data were then gathered from the test and scores were computed to make comparisons between groups and across verbs of three types. A correct answer was accorded a value of 1, an incorrect answer a value of -1, and an unsure answer a value of 0. A statistical analysis was undertaken with SPSS to discern whether differences were significant.

RESULT AND DISCUSSION

Table 3. Mean Scores of Verb Types Among the Three Participant Groups

Groups	Verb types			Average
	action verb	E-T verb	T-E verb	
Junior high students	2.256	1.103	0.333	1.231
Senior high students	3.465	0.950	-0.400	1.342
Graduate students	3.682	2.546	1.364	2.530
Average	3.050	1.365	0.267	

Table 3 shows the mean scores for each verb type by the three proficiency groups. The results showed that, in general, participants succeeded in action verbs first, experiencer-theme verbs next, and

theme-experiencer verbs last, as indicated by the mean scores (3.050 > 1.365 > 0.267). This order correlates with the Thematic Hierarchy, according to which one assumes that an action verb with an agent subject is more readily acquired than an experiencer-theme verb with an experiencer subject; and the latter more readily than a theme-experiencer verb with a theme subject. The general performance among the three groups is that the graduate students are superior to the senior high school students, who are in turn superior to the junior high school students (displayed according to the means 2.530 > 1.342 > 1.231). Participants hence progress in their learning of all three types of verbs as their levels of English proficiency improve.

Inspection of the means of the two types of psych verbs reveals that the order of acquisition is not so straightforward. For psych verbs of both types, the junior high school group succeeded better than the senior high school group (1.103 > 0.950 for E-T verbs and 0.333 > -0.400 for T-E verbs). This phenomenon might signify that, during the first few years of learning English, learners met only a few psych verbs, which were readily distinguishable, but, on addition of more psych verbs to the learning list, the complicated conflation of psych verbs became increasingly confusing, causing intermediate learners to perform worse than beginning learners. With further L2 input, L2 learners eventually succeeded in acquiring the two types of psych verbs.

To investigate further whether the differences are fortuitous, we applied a SPSS statistical analysis to test the significance. Table 4 shows that, for the easiest action verb, significant differences are observed between graduate and junior high ($p = 0.001$) and between senior high and junior high ($p = 0.001$) groups but not between graduate and senior high groups ($p = 0.391$), signifying that the major gap occurs between the upper two and the lowest groups. This result might indicate that the graduate and the senior high groups have acquired the action verb to some extent, unlike the junior high group. As the learning progresses to the next E-T verb, the major gap occurs between the top and the lower two groups since significant differences exist between the graduate and the senior high groups ($p = 0.000$) and between the graduate and the junior high groups ($p = 0.002$), but not between the senior high and the junior high groups ($p = 0.676$). For the most difficult T-E verb, the major gap remains between the graduate and the senior high ($p = 0.000$), but the differences between the graduate and the junior high groups ($p = 0.021$) and between the senior high and the junior high groups ($p = 0.036$)

are also large and evident. This result might indicate that the lower two groups performed significantly differently, with the junior high group being superior to the senior high group. Since the mean scores of the other two groups are small, only the graduate group has learned the essence of the T-E verb.

Table 4. Comparison of Mean Scores by Language Proficiency in Verb Categories

Verb type	Proficiency group		
	graduate vs. senior	senior vs. junior	graduate vs. junior
action verb	0.391 (n.s.)	0.001**	0.001**
E-T verb	0.000**	0.676 (n.s.)	0.002**
T-E verb	0.000**	0.036*	0.021*

* $p < 0.05$ ** $p < 0.01$ n.s. = difference insignificant at the 0.05 level

To discover whether the active-passive constructions of verbs of the three types make any difference in L2 acquisition, we made a comparison of the means of all three types of verbs; the results are shown in Table 5. Among the three types, only the action verbs show significant difference in the active-passive contrast. Moreover, as the mean scores of the other groups are relatively small, verbs of all types except T-E verbs show higher mean scores in the passive construction than in the active construction.

Table 6 below shows a further examination of the active-passive contrasts for the three types of verbs within each individual proficiency group. In the graduate group, a significant difference of active-passive contrasts is observed for both an action verb ($p = 0.050$) and a T-E verb ($p = 0.024$), but not in a E-T verb ($p = 0.780$). For the T-E verb, the active construction is better done than the passive constructions. In the senior high group, no significant difference is observed for any verb type. In the junior high group, a significant difference of active-passive contrasts is observed in overall means ($p = 0.002$), an action verb ($p = 0.003$), and for a verb of T-E type ($p = 0.047$). Unlike the graduate group, in the T-E verb, the passive construction is more successful than the active one. The results seem to show that passive constructions are not more difficult than active constructions since all means, except the T-E

verb, are greater for the passive structure than for the active structure. The transition for the T-E verb indicates that a passive construction is easier than an active construction since the junior high group learned the passive better than the active. In English, an active T-E sentence involves a conflation of causative and adjectival passive psych verb (e.g. something CAUSE [he is *frightened*] → something *frightens* him), and in Chinese, the absence of this conflation (as explained in 2.4, the conflation is rare) makes the active construction difficult for Chinese EFL learners. The fact that the graduate group's means for the active T-E sentence are greater than that for the passive one reveals that these students have eventually reset the conflation parameter and learned the active construction of a T-E verb. This result also indicates that, only when EFL learners are advanced in English proficiency, do they acquire the active T-E structure.

Table 5. Comparison of Active-Passive Contrasts in Three Types of Verbs

Verb type	Active-passive	Means	Significance
action verb	active	0.7129	0.000**
	passive	0.9109	
E-T verb	active	0.3366	0.922
	passive	0.3465	
T-E verb	active	0.08581	0.489
	passive	0.009901	
all verbs	active	0.3784	0.402
	passive	0.4224	

* $p < 0.05$ ** $p < 0.01$

Table 6. Comparison of Active-Passive Contrasts for Three Groups

Verb type	Graduate group		Senior group		Junior group	
	mean	p value	mean	p value	mean	p value
action-active	0.8939	0.050*	0.8417	0.151	0.4786	0.003**
action-passive	1.0000		0.9500		0.8205	
E-T active	0.6515	0.780	0.2500	0.757	0.2479	0.511
E-T passive	0.5909		0.2000		0.3590	
T-E active	0.4848	0.024*	-0.0500	0.235	0	0.047*
T-E passive	-0.0909		-0.2500		0.3333	
all active	0.6768	0.107	0.3472	0.565	0.2422	0.002**
all passive	0.5000		0.3000		0.5034	

* $p < 0.05$ ** $p < 0.01$

To conclude that the senior high group acquired psych verbs less well than the junior group only based on the smaller mean score of the senior high group is inappropriate. To discern that the senior group was more advanced than the junior group in the learning of psych verbs, we compare in Table 7 the accuracy rate by the three groups. This rate is computed according to the number of sentences correctly answered in relation to the total number of sentences. The accuracy rates by the three groups correlate with the general order of learning shown in Table 3, suggesting that the senior group was at a transition stage from an initial level to an advanced level. Since the senior high group's mean scores for psych verbs are much smaller than those of the action verbs, it shows that action verbs have ceased to be a learning problem, but psych verbs remain problematic.

Table 7. Accuracy Rate of All Three Verbs Types by the Three Participant Groups

		Junior group	Senior group	Graduate group
Action verbs	correct judgment	84	110	62
	incorrect judgment	28	8	3
	unsure of the answer	5	1	1
	total	117	119	66
	rate of accuracy	72%	92%	94%
Experiencer-theme Verbs	correct judgment	69	74	54
	incorrect judgment	40	44	11
	unsure of the answer	8	2	1
	total	117	120	66
	rate of accuracy	59%	62%	82%
Theme-experiencer verbs	correct judgment	50	57	45
	incorrect judgment	50	61	13
	unsure of the answer	17	0	8
	total	117	118	66
	rate of accuracy	43%	48%	68%

For psych verbs of the two types, the difficulty mainly results from the T-E type, according to the observed accuracy rates of the senior high and junior high groups and the fact that a significant difference exists only for the T-E verb but not for the E-T verb. As the E-T verb has no alternative conflation in its representation, the parameter needs not to be reset in Interlanguage grammar and is thus simpler for Chinese learners. The T-E verb has a causative conflation and requires parameter resetting when Chinese learners advance from a passive construction to an active construction; the acquisition is thus slower and entails more Interlanguage errors. These results correlate well with the Thematic Hierarchy and UTAH mentioned in section 2.

CONCLUSION

In this exploration of L2 acquisition of English psych verbs by Chinese EFL learners, the results of the grammaticality judgment test indicate that psych verbs are more difficult to learn than action verbs, and that, between psych verbs of the two subcategories, T-E verbs are more difficult than E-T verbs. All three groups of disparate English proficiency show the same order of acquisition — action verbs > (learnt before) E-T verbs > T-E verbs. For action verbs a significant difference is found between the graduate and senior groups and the junior group, but for learning psych verbs a significant difference is found between the graduate group and the other two groups. The senior high group succeeded less well in psych verbs than the junior high group; it could be reasoned that the senior high group is in the process of parameter resetting and thus confounding the two subcategories.

As all participants attained greater mean scores for most passive constructions than for the corresponding active constructions, passive constructions reveal no difficulty for Chinese learners. For Chinese learners the passive construction of the T-E psych verb is easier than the active construction; this corresponds to the Thematic Hierarchy that an experiencer is higher than a theme in the thematic subject position. The active construction of the T-E verb involves a conflation of causative and adjectival passive, shifting theme to the subject position and depreciating the experiencer. A Chinese L2 learner must reset the parameter before he can successfully acquire this English structure. Our research shows that only advanced Chinese learners have mastered this active form.

A limitation of this project is that its participants comprise only 101

Ai-li C. Hsin & Jia-yi C. Lin

students from three schools. One should interpret the results with caution: our findings might not be generalized to other populations or groups with other linguistic backgrounds. Cross-validation is recommended for future study. Our findings and discussion might nevertheless shed some light on pedagogical inspirations of the teaching and learning of English psych verbs.

NOTES

1. A foreign friend of mine reminds me of the possibility of inanimate subject in an E-T psych verb such as *enjoy*. For instance, the construction *Jazz is enjoying a revival after obscurity for several years* is not optimal but still acceptable. However, jazz in the sentence is still an experiencer, not a theme. The E-T psych verb can have nothing but the experiencer as its subject and normally it does not accept theme in the subject position even when the construction alters to a passive form, as shown below.
 - i. *The jazz enjoys the audience.
 - ii. ??The jazz is enjoyed by the audience.
2. Throughout the paper, *Hanyu Pinyin* Romanization system is used for the transcription of the Mandarin data.
3. In Generative semantics, *Students fear exams* and *Exams frighten students* are considered two different constructions. For the latter, the verb *frighten* derives from a semantic composition of a causative light verb and a E-T verb *fear*. With a causative construction like this, the argument *Cause* takes precedence over *Experiencer* in the syntactic position.
4. CL: classifier
5. ASP: aspect

Ai-li C. Hsin & Jia-yi C. Lin

REFERENCES

- Belletti, A., & Rizzi, L. (1988). Psych-verbs and θ -theory. *Natural Language and Linguistic Theory*, 6, 291-352.
- Cupples, L. (2002). The structural characteristics and on-line comprehension of experiencer — verb sentences. *Language and Cognitive Processes*, 17(2), 125-162.
- Gascón, C. D. (1998). The Spanish psych verb construction; Beginning and intermediate learners' patterns of usage. *Texas Papers in Foreign Language Education*, 3(3), 69-84.
- Juffs, A. (1996a). *Learnability and the lexicon: Theories and second language acquisition research*. Amsterdam: John Benjamins.
- Juffs, A. (1996b). Semantics-syntactic correspondences in second language acquisition. *Second Language Research*, 12, 177-221.
- Lai, W. J. (2004). *Chinese psychological predicates: Interactions between constructions & semantics*. Unpublished master thesis, National Tsing hua university, Hisnchu.
- Pesetsky, D. (1995). *Zero syntax; Experiencers and cascades*. Cambridge, MA: MIT Press.
- Pica, T. (2003). Second language acquisition: Research and applied linguistics. *Working Papers in Educational Linguistics*, 18(2), 1-26.
- Sato, Y. (2003). Japanese learners linking problems with English psych verbs. *Reading Working Papers in Linguistics*, 7, 125-144.
- White, L. (2003). *Second language acquisition and universal grammar*. Cambridge: Cambridge University Press.
- White, L., Brown, C., Bruhn de Garavito, J., Chen, D., Hirakawa, M., & Montrul, S. (1999). Psych verbs in second language acquisition. In G. Martohardjono & E. Klein (Eds.), *The development of second language grammars: A generative approach* (pp. 173-99). Amsterdam: John Benjamins.
- Whitley, M. (1995). Gustar and other psych verbs: A problem in transitivity. *Hispania*, 78(3), 573-585

CORRESPONDENCE

Ai-li C. Hsin, Department of English, National Kaohsiung Normal University, Kaohsiung City, Taiwan

E-mail address: gealhsin@nknucc.nknu.edu.tw

Jia-yi C. Lin, Shu-Te University, Kaohsiung County, Taiwan

E-mail address: linpeach1@yahoo.com.tw

APPENDIX A

Questionnaire
This research questionnaire aims to explore Chinese EFL/ESL learners' acquisition process of English psych verbs. Your answer will be used only for research purpose and nothing else. We really appreciate your assistance with this work.

I. Personal Information: Please check the group that you belong to.

- junior high school student senior high school student
 graduate student with English major

II. Questions:

Please judge the grammaticality of the following sentences. If you think the sentence is grammatical, please check the box of 'correct' or the box of 'incorrect' if you judge the sentence ungrammatical. If you are not sure, please check 'unsure.'

1. The girl feared big cats.	<input type="checkbox"/> correct <input type="checkbox"/> unsure <input type="checkbox"/> incorrect
2. Students played basketball.	<input type="checkbox"/> correct <input type="checkbox"/> unsure <input type="checkbox"/> incorrect
3. His father surprised his decision.	<input type="checkbox"/> correct <input type="checkbox"/> unsure <input type="checkbox"/> incorrect
4. The movie disappointed many people.	<input type="checkbox"/> correct <input type="checkbox"/> unsure <input type="checkbox"/> incorrect
5. The room cleaned the old lady.	<input type="checkbox"/> correct <input type="checkbox"/> unsure <input type="checkbox"/> incorrect
6. The old man enjoyed nice music.	<input type="checkbox"/> correct <input type="checkbox"/> unsure <input type="checkbox"/> incorrect
7. His mother cooked dinner.	<input type="checkbox"/> correct <input type="checkbox"/> unsure <input type="checkbox"/> incorrect
8. The situation worried the police.	<input type="checkbox"/> correct <input type="checkbox"/> unsure <input type="checkbox"/> incorrect
9. Homework hated children.	<input type="checkbox"/> correct <input type="checkbox"/> unsure <input type="checkbox"/> incorrect
10. The letter was written in English.	<input type="checkbox"/> correct <input type="checkbox"/> unsure <input type="checkbox"/> incorrect
11. The man was admired for his courage.	<input type="checkbox"/> correct <input type="checkbox"/> unsure <input type="checkbox"/> incorrect
12. The boy was frightened of the dog.	<input type="checkbox"/> correct <input type="checkbox"/> unsure <input type="checkbox"/> incorrect