

L3 Spanish Effects in L2 Acquisition of English Causative Psych Verbs

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An increase in interest in third language (L3) acquisition among researchers in the generative linguistic framework has contributed to emerging theoretical models such as the Typological Primacy Model (Rothman, 2010), the Linguistic Proximity Model (Westergaard et al., 2017), and the Scalpel Model (Slabakova, 2017). These models aim to explore the role of previously acquired languages, the first (L1) and second (L2) language, in the acquisition of an L3 and to explain how transfer occurs. While the majority of L3 studies have followed this research line, several recent studies have offered additional insights into a multilingual mind by investigating regressive transfer or transfer from an L3 to one or both of the previously acquired languages. This suggests the multidirectionality of language transfer in multilingual speakers. In other words, all languages interact with one another in all directions. The present study examined the effect of L3 Spanish on L2 English, or regressive transfer, in the acquisition of English causative psych verbs by L1-Thai speakers.

1. Attrition in L3 acquisition

A later acquired language can cause changes in a previously acquired language, known as language attrition. Evidence from L1 attrition research unveils the bidirectionality of language transfer: the L1 and the L2 interact with each other. In trilinguals, transfer is multidirectional with all three languages interacting with each other in all directions. That is, apart from transfer from the L1 and/or the L2 to the L3, the L3 can affect previously acquired languages, the L1 and the L2. The stability-based approach proposes that the L2 is more likely than the L1 to be affected by the L3 because the L1 is acquired prior to the critical/sensitive period and is thus more stable. Under this approach are the Phonological Permeability Hypothesis (Cabrelli Amaro, 2017b) and the Differential Stability Hypothesis (Cabrelli Amaro, 2017a), which account for phonological and syntactic attrition, respectively. The typology-based approach,

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by contrast, highlights the prominent role of typological similarity. One of the previously acquired languages, whether it be the L1 or the L2, is more vulnerable than the other to L3 influence if it is typologically similar to the L3, according to the Similarity Convergence Hypothesis by Brown-Bousfield and Chang (2023).

Besides L3 influence on L1 vs. L2, another line of research concerns an L3 cumulative effect on the L2. That is, L3 knowledge can enhance L2 linguistic representation when they are similar with evidence from definiteness, specificity, number agreement, and genericity (Park & García Mayo, 2023; Tsang, 2016; Velić et al., 2025). Park and García Mayo (2023), for example, examined the acquisition of the L2 English article system by comparing L1-Korean L2-English speakers with L1-Korean L2-English L3-Spanish speakers. Data from an acceptability judgment task and a self-paced reading task demonstrated that L3 speakers demonstrated higher sensitivity to article errors than L2 speakers. The researchers attributed L3 speakers' performance to enhanced knowledge of the English article system which was positively influenced by knowledge of the Spanish article system. Puig-Mayenco (2023) adds that the degree of transfer to the L2 is stronger if the L1 and L3 are linguistically similar, a phenomenon which he calls the Sandwich effect.

2. Causative psych verbs

Psychological verbs, also known shortly and widely as psych verbs, refer to verbs that express a change in a psychological state. These verbs comprise two semantic roles: Theme and Experiencer. Belletti and Rizzi's (1988) seminal work categorizes psych verbs, specifically in Italian, into three classes as in (1) – (3) (p. 291). The present work focuses on only the first two classes, commonly referred to as subject-experiencer and object-experiencer psych verbs, respectively. Subject-experiencer psych verbs like *teme* 'fears' in (1) map an Experiencer, *Gianni*, to the subject position and a Theme, *questo* 'this', to the object. By contrast, object-experiencer psych verbs like *preoccupa* 'worries' in (2) demonstrate an opposite mapping. The sentential subject, *questo* 'this', is a theme while the object, *Gianni*, is an Experiencer, as the name suggests. The second and third classes are similar in that they both have an object Experiencer. However, the object is case-marked differently. The object of Class II is marked with an accusative case whereas Class III psych verbs have a dative object Experiencer marked by *a* in (3).

- | | | |
|--------------|--|-------------------|
| (1) Class I | Gianni teme
Gianni fears
'Gianni fears this.' | questo.
this |
| (2) Class II | Questo preoccupa
this worries
'This worries Gianni.' | Gianni.
Gianni |

- (3) Class III A Gianni piace questo.
 to Gianni pleases this
 ‘This pleases Gianni.’

Central to this study is causation which is encoded in object-experiencer psych verbs as seen in CAUSE in their event structure in (5) as compared to the event structure of subject-experiencer psych verbs in (4) which does not consist of causation. While subject-experiencer psych verbs express a psychological state that the subject has toward the object, object-experiencer psych verbs comprise both a cause and a change in a psychological state of the object. In other words, object-experiencer psych verbs are causative while subject-experiencer psych verbs are not. Throughout the paper, I will refer to the former as causative psych verbs and the latter as non-causative psych verbs.

- (4) John fears tigers.

[*x* <STATE> *y*]

- (5) Tigers frighten John.

[*x* CAUSE [*y* BECOME <STATE>]]

Besides the lexical causative form of psych verbs, periphrastic causatives, which consist of two clauses, i.e., one with a causative verb or morpheme and the other with another lexical verb, are an alternative structure that can be used to express causative psych events. For instance, sentence (5) can be paraphrased as (12). It is noteworthy that the two forms are not perfect synonyms (see Shibatani, 1976 among others). English and Spanish allow both causative forms with the periphrastic construction comprising *make* in English in (12) and *hacer* ‘make’ in Spanish in (13b) with (13a) as its lexical counterpart. Note that in (13a) and (13b), DOM stands for a differential object marker. While English and Spanish have both causative and non-causative psych verbs, Thai only has the latter. To express causative psych events, only the periphrastic causative form is available in the language with the causative verb *tham(hây)* ‘make’ as in (14b). The psych predicate *prà?làatcay* ‘surprised’ is adjectival in Thai and cannot be used as a transitive verb as in (14a). It is noteworthy that even though all three languages here allow the periphrastic form, the causative verbs subcategorize for different phrasal categories. English and Thai require an adjective phrase after the verb while *hacer* in Spanish subcategorizes for an inflectional phrase with an infinitive verb (Montrul, 2001). Table 1 summarizes the distribution of psych verbs in Thai, English, and Spanish.

- (12) Tigers make John frightened.

- (13)a. Los tigres asustan a Juan.
the tigers frighten DOM Juan
‘The tigers frighten Juan.’
- b. Los tigres hacen asustar a Juan.
the tigers make frighten DOM Juan
‘The tigers make Juan frightened.’
- (14)a. *Methawin pràʔlàatcay Lada
Methawin surprise Lada
‘Methawin surprises Lada.’
- b. Methawin tham(hây) Lada pràʔlàatcay
Methawin make Lada surprised
‘Methawin makes Lada surprised.’

Table 1. Distribution of psych verbs and causative forms

	Thai	English	Spanish
Non-causative psych verbs	✓	✓	✓
Lexical causative psych verbs	✗	✓	✓
Periphrastic causative psych predicates	✓	✓	✓

Previous L2 studies have investigated the causative nature of causative psych verbs in English, which lexically incorporate a zero, overt causative morpheme. This is represented as CAUSE in the event structure in (5). Some languages such as Chinese, Korean, and Thai lack this verb class. To express a causative psych event, these languages employ the periphrastic causative construction, which consists of a causative verb or morpheme and a psych predicate, whereas languages like English and Spanish allow both the lexical and the periphrastic causative forms. Due to this crosslinguistic difference, L2 learners whose L1 lacks the lexical form tend to prefer the periphrastic form over the lexical one, showing L1 transfer (Chen, 1996; Juffs, 1996; Montrul, 2001; Witoon & Singhapreecha, 2012). That is, the causative verb *make* in the periphrastic causative form might serve as a surrogate of the periphrastic or morphological causative psych predicates in the L1. Juffs (1996) also found that highly proficient L1-Chinese L2-English speakers’ judgments of lexical causative psych verbs were comparable to those of L1-English speakers, indicating that a positive correlation between proficiency and targetlike performance in the acquisition of English causative psych verbs. However, a tendency to prefer the periphrastic causative form with *make* was still observed in the former whereas the latter tended to prefer to lexical causative form.

To date, no L3 studies have examined an L3 cumulative effect on the L2 in the acquisition of argument structure. The current study aims to fill this research gap by investigating whether knowledge of causative psych verbs in L3 Spanish

can enhance that in L2 English by comparing L1-Thai L2-English speakers to L1-Thai L2-English L3-Spanish speakers.

3. Methodology

3.1. Instruments

To examine causative psych verbs and language attrition in L3 speakers, the study employed two main tasks: an acceptability judgment task (AJT) and a vocabulary translation task (VTT). The AJT consisted of six non-causative psych verbs and twelve causative psych verbs. Two experimental lists were created to counterbalance the distribution of causative psych verbs in the two forms (lexical vs. periphrastic) while non-causative psych verbs remained consistent in both lists. That is, each causative psych verb appeared only once in either the lexical or the periphrastic form for each participant. All psych verbs were chosen from Levin's (1993) list of English psych verbs and were checked for frequency by consulting a list of the most frequent 5,000 words in American English (Davies & Gardner, 2010). In addition to the 18 target items, 32 fillers were also included. Examples of the target items are in Table 2. The task asked participants to judge the acceptability of each sentence on a 7-point Likert scale where 1 indicated 'completely unacceptable' and 7 indicated 'completely acceptable.' An option of 'I don't know' was also provided.

Table 2. Example of test items

Conditions	Sentences
Non-causatives	Emma loves her collection of classic books.
Lexical causatives	Peter never disappoints his parents.
Periphrastic causatives	Peter never makes his parents disappointed.

The VTT asked L1-Thai participants to translate 40 English words used in the AJT into Thai: 12 causative psych verbs, 6 non-causative psych verbs, and 22 fillers. The task was included to ensure that participants knew the meaning and structure of causative psych verbs, following Chung (2023), Montrul (2001), and White et al. (1999). Incorrect translation responses were used to exclude items in the AJT from data analysis. The results from this task were also analyzed to examine translation accuracy. Three hypotheses were formulated as follow:

Hypothesis 1: Non-causative psych verbs would be acceptable across all groups due to their presence in all three languages.

Hypothesis 2: L3 speakers would show higher acceptability and higher translation accuracy for causative psych verbs than L2 speakers.

Hypothesis 3: L3 speakers would show a less pronounced preference for the periphrastic causative form over the lexical one compared to L2 speakers.

3.2. Participants

The study comprised 14 L1-English, 19 L1-Thai L2-English (TE), and 26 L1-Thai L2-English L3-Spanish (TES) speakers. Table 3 presents their demographic information. The three groups completed a CEFR-based multiple-choice English proficiency test and the AJT. In addition, both the TE and TES groups carried out the VTT and the TES group also took a multiple-choice Spanish proficiency test. The tasks were implemented in Qualtrics and were presented in the following order: the AJT, the VTT, the English proficiency test, and the Spanish proficiency test. A simple linear regression model followed by a pairwise comparison revealed significant differences in English proficiency between L1-English speakers and both TE ($\beta = 4.05$, $SE = 0.451$, $t = 8.978$, $p < .0001$) and TES ($\beta = 4.937$, $SE = 0.413$, $t = 11.945$, $p < .0001$) participants. However, the two L1-Thai groups did not differ significantly ($p > .05$).

Table 3. Demographic information of participants

	L1-English (<i>n</i> = 14)		TE (<i>n</i> = 19)		TES (<i>n</i> = 26)	
	Mean	Range	Mean	Range	Mean	Range
Age at the time of testing	19.36	18–22	21.05	18–26	22.07	21–24
AOA of English			4.26	2–10	4.92	3–9
AOA of Spanish					18	15–20
English proficiency	37.79	35–40	31.63	21–39	31	14–40
Spanish proficiency					19	12–22

Note. AOA stands for age of acquisition. The unit of measurement of age at the time of testing and AOA of English and Spanish is in year. The maximum scores of English and Spanish proficiency tests are 40 and 25, respectively.

A questionnaire adapted from the Bilingual Language Profile (Birdsong et al., 2012) was also administered to all participants prior to the AJT. It is noteworthy that some TE and all TES participants reported knowing other non-native languages. Data from the background questionnaire indicated that Thai was the most dominant language followed by English in TE speakers or Spanish in TES participants. All of TES speakers were also fourth-year students majoring in Spanish, suggesting that their L3 Spanish was in active use at the time of testing.

4. Results

One non-causative and one causative psych verb were excluded from data analysis. The verb, *fear*, was removed since some participants found it to be synonymous with *frighten*. Previous studies also noted L2 speakers’ peculiar behaviors when encountering this verb (Chen, 1996; White et al., 1999). The verb, *disappoint*, was excluded due to some technical issue with item implementation.

4.1. Acceptability judgment task

First, data cleaning was conducted by using results from the VTT. As explained earlier, the VTT was implemented to ascertain that L1-Thai participants knew both the structure and meaning of causative psych verbs. Without this implementation, the acceptability of causative psych verbs could be influenced by misinterpretation of the argument structure of causative psych verbs. Incorrect responses in the VTT were used to filter out data points in the AJT. For example, if the participant mistranslates *surprise*, the rating of *surprise* is removed from further analysis.

Table 4 presents means of the ratings across the three groups and the three forms with standard deviations in parentheses. The ratings are also visualized in Figure 1. Descriptive data showed that all groups rated all forms as highly acceptable (all above 5 out of 7). When comparing the two causative forms, two patterns emerged. L1-English and TES speakers rated the lexical form higher than the periphrastic form. TE speakers, however, rated the periphrastic form as more acceptable than the lexical form.

Table 4. Means and SD of the AJT

Form	L1-English	TE	TES
Non-causatives	6.3(.69)	5.78(.93)	5.56(1.11)
Lexical causatives	6.36 (.49)	5.99(1.19)	5.72(1.17)
Periphrastic causatives	5.87(.7)	6.31(.89)	5.49(1.12)

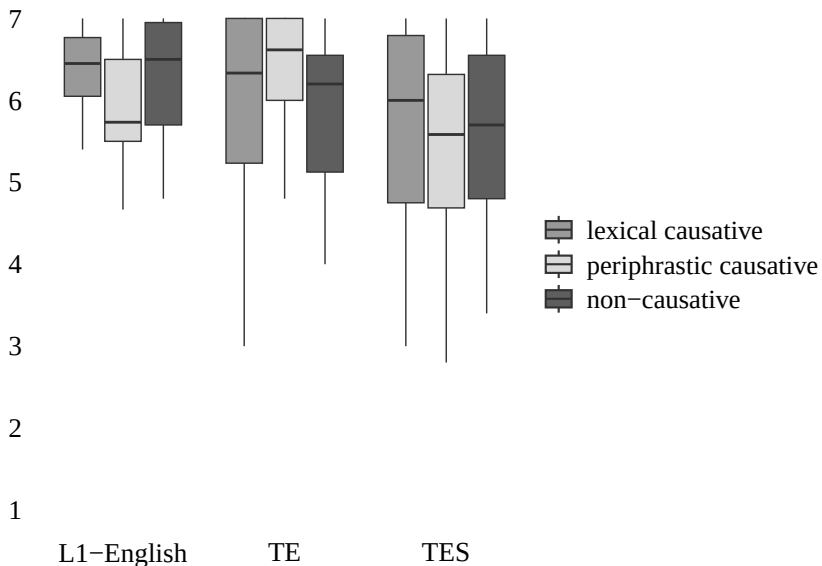


Figure 1. Boxplot of the Ratings

To further investigate if the ratings between the two causative forms were significantly different, cumulative link mixed models (CLMMs) were employed using the *clmm* function in the *ordinal* package (Christensen, 2023) in R (R Core Team, 2023). The omnibus model included *Group* (L1-English vs. TE vs. TES), *Form* (non-causative vs. lexical causative vs. periphrastic causative), and English proficiency, which was treated as a continuous variable, as fixed effects with random intercepts and slopes for item by *Group* and for subject by *Form*. Table 5 displays results from the omnibus model with the following components as the reference level: L1-English speakers for *Group* and lexical causative psych verbs for *Form*. The findings only indicated a significant effect of English proficiency with more proficient speakers accepting all forms more than less proficient ones ($\beta = 0.09$, $SD = 0.03$, $z = 2.97$, $p < .005$).

Table 5. Results from the AJT

	β	SD	z	p	95% CI
TE	-0.068	0.776	-0.088	.929	-1.58, 1.45
TES	-0.417	0.638	-0.654	.513	-1.66, 0.83
Periphrastic causative	-0.911	0.606	-1.505	.132	-2.09, 0.27
Non-causative	-0.101	0.603	-0.168	.867	-1.28, 1.08
English proficiency	0.092	0.031	2.974	.003	0.03, 0.15
TE $\times$ Periphrastic causative	1.229	0.908	1.354	.176	-0.54, 3.00
TES $\times$ Periphrastic causative	0.449	0.677	0.664	.507	-0.87, 1.77
TE $\times$ Non-causative	0.246	0.901	0.274	.784	-1.51, 2.01
TES $\times$ Non-causative	-0.035	0.573	-0.062	.951	-1.15, 1.08

4.1.1. Within-group analysis

The three forms, i.e., non-causative, lexical causative, and periphrastic causative, were then compared using CLMMs to examine the effect of *Form* within each participant group. Included in each subset model as the fixed effect was *Form* with the lexical causative form as the reference level. First, non-causative psych verbs were not significantly different from lexical causative psych verbs across all groups (all $ps > .05$). Of particular focus here is the comparison between lexical and periphrastic causatives. TE and TES speakers did not differentiate between lexical and periphrastic causatives (all $ps > .05$). However, a marginally significant difference with a moderate effect size was observed between the two causative forms in L1-English ($\beta = -0.9$, $SD = 0.49$, $z = -1.83$, $p = .06595$, $d = .79$), indicating that they tended to prefer lexical causatives over periphrastic ones. Lastly, English proficiency modulated only the ratings of TES speakers ($\beta = 0.07$, $SD = 0.03$, $z = 2.01$, $p < .05$), whose Spanish proficiency was not a significant factor ($p > .05$).

4.1.2. Between-group analysis

The three groups' responses were compared. Each model had *Group* and English proficiency as fixed effects with by-item and by-subject random

intercepts with L1-English speakers as the reference level. *Group* did not reach statistical significance in any form showing that the three groups behaved similarly (all $ps > .05$). English proficiency was significant in the ratings of non-causative psych verbs only ($\beta = 0.07$, $SD = 0.02$, $z = 2.82$, $p < .05$).

4.2. Vocabulary translation task

In this task, it was hypothesized that participants would show higher accuracy for non-causative psych verbs than causative psych verbs. Thanks to the L3 cumulative effect, TES speakers would be more accurate than TE speakers in translating causative psych verbs. For data coding, the correct response must consist of a Thai causative verb and a psych predicate. Correct and incorrect translations were coded as ‘1’ and ‘0’, respectively. Descriptive results of translation accuracy are presented in Table 6 and Figure 2. As predicted, both TE and TES participants demonstrated high translation accuracy with non-causative psych verbs, which was above 90%. However, translation accuracy decreased with causative psych verbs in both groups: 55% in TE and 61.2% in TES speakers.

Table 6. Translation accuracy

Group	Noncaus	Raw Count	Proportion	Caus	Raw Count	Proportion
TE	Correct	89	93.7%	Correct	116	55.5%
	Incorrect	6	6.3%	Incorrect	93	45.5%
TES	Correct	126	96.9%	Correct	175	61.2%
	Incorrect	4	3.1%	Incorrect	111	38.8%

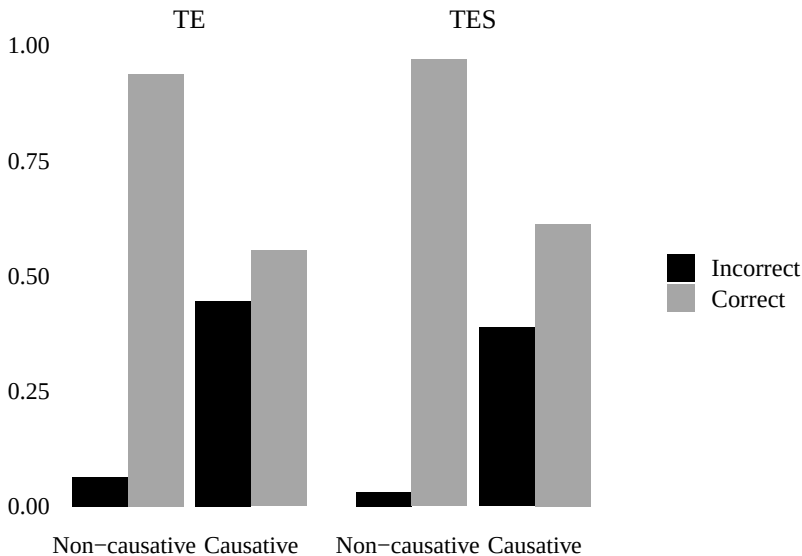


Figure 2. Proportions of translation accuracy

To examine whether the two L1-Thai groups differed with statistical significance in the VTT, inferential statistics was conducted. Since the outcome variable was binary (correct vs. incorrect), an omnibus generalized linear mixed-effects model (GLMM) was employed for data analysis using the *glmer* function in the *lme4* package (Bates et al., 2015) in R (R Core Team, 2023). The model included *Form* (causative vs. non-causative), *Group* (TE vs. TES), their interaction, and English proficiency as fixed effects as well as by-item and by-subject random intercepts. In Table 7, the results demonstrated effects of *Form* ($\beta = 6.15$, $SD = 2.29$, $z = 2.68$, $p < .01$) and *Proficiency* ($\beta = 0.31$, $SD = 0.05$, $z = 6.15$, $p < .001$) whereas *Group* and its interaction with *Form* did not.

Table 7. Results from the VTT

	β	SD	z	p
(Intercept)	-9.65634	1.68508	-5.73049	.00000
Non-causative	6.15917	2.29085	2.68859	.00718
TES	0.68662	0.60483	1.13524	.25627
English proficiency	0.31627	0.05142	6.15132	.00000
Non-causative $\times$ TES	1.95554	2.56002	0.76388	.44494

4.2.1. Within-group analysis

Following the analysis of the AJT, two subset models were analyzed using GLMMs to investigate differences between the two forms within each L1-Thai group. In each model, *Form*, English proficiency, and their interaction were included as fixed effects with by-subject and by-item random intercepts. Spanish proficiency was also added to the TES model. In both TE and TES models, statistical significance was observed in both *Form* (TE: $\beta = 16.67$, $SD = 3.23$, $z = 5.16$, $p < .001$; TES: $\beta = 28.58$, $SD = 8.52$, $z = 3.36$, $p < .001$) and English proficiency (TE: $\beta = 0.39$, $SD = 0.06$, $z = 6.55$, $p < .001$; TES: $\beta = 0.39$, $SD = 0.07$, $z = 5.23$, $p < .001$). Their interaction also emerged as a significant factor in TE ($\beta = -0.43$, $SD = 0.09$, $z = -4.57$, $p < .001$) and TES speakers ($\beta = -0.76$, $SD = 0.23$, $z = -3.26$, $p < .005$). To explain, English proficiency did not affect translation accuracy of non-causative psych verbs. By contrast, it modulated that of causative psych verbs in both groups. That is, regardless of English proficiency, both TE and TES participants showed high accuracy when translating non-causative psych verbs. The translation of causative psych verbs in both participant groups, conversely, became more accurate as English proficiency increased. Spanish proficiency, however, showed no significant effect in the TES model ($p > .05$).

4.2.2. Between-group analysis

To further investigate whether the two groups translated the two verb types similarly or not, between-group analyses were conducted. Each model consisted

of *Group* and English proficiency as fixed effects and item and subject as random effects. The reference level was TE speakers. *Group* was not a statistically significant factor in non-causative and causative psych verbs (all $ps > .05$), indicating that both TE and TES speakers translated the two forms similarly. While English proficiency did not reach statistical significance in non-causative psych verbs ($p > .05$), it modulated translation accuracy of causative psych verbs ($\beta = 0.41$, $SD = 0.06$, $z = 6.95$, $p < .001$). Their translation of causative psych verbs became more accurate with increased English proficiency.

5. Discussion

The present study examined the acquisition of causative psych verbs in L2 English by two groups of L1-Thai speakers, namely, TE and TES speakers. Data from an acceptability judgment task (comprehension) and a vocabulary translation task (production) demonstrated that non-causative psych verbs did not pose learning challenges to the two L1-Thai groups due to the presence of these verbs in all languages of interest. That is, their existence in the L1 could facilitate the acquisition of non-causative psych verbs. The first hypothesis is thus confirmed. The second hypothesis posited that TES speakers would be able to accept and correctly translate causative psych verbs in L2 English more than TE speakers due to cumulative regressive transfer from L3 Spanish, in which causative psych verbs are also present. The findings, however, did not reflect the predicted advantage of TES speakers since the two L1-Thai groups' behaviors were not statistically different. Since the two L1-Thai groups performed similarly, the hypothesis was not supported. Importantly, English proficiency was found to modulate the translation of causative psych verbs in both TE and TES groups. This corroborates Juffs' findings (1996) who found that higher proficiency resulted in targetlike performance on causative psych verbs. Lastly, the third hypothesis predicted that TES speakers would demonstrate a less pronounced preference for the periphrastic form of causative psych verbs than TE speakers. The results, again, did not confirm this prediction. None of the two L1-Thai groups showed a significant preference for one form over the other. It is worth noting that the study might suffer from statistical underpower due to a small sample size.

Despite no statistically significant difference between the two L1-Thai groups, it is worth revisiting and examining descriptive data in detail. First of all, L1-English speakers tended to differentiate between the two causative forms by rating the lexical form higher than the periphrastic one: 6.36 (lexical) vs. 5.87 (periphrastic). TE speakers, by contrast, were prone to rate the periphrastic form higher, indicating evidence of L1 transfer: 5.99 (lexical) vs. 6.31 (periphrastic). That is, they might have used the causative verb *make* as a surrogate of the equivalent structure in L1 Thai, confirming previous L2 studies (Juffs, 1996; Montrul, 2001; Witton & Singhapreecha, 2012). TES speakers, however, tended to prefer the lexical form over the periphrastic one, showing a pattern that aligned with L1-English participants: 5.72 (lexical) vs. 5.49 (periphrastic). It is possible that this targetlike pattern was due to knowledge of L3-Spanish causative psych

verbs. When two causative forms are available for the expression of causative psych events, the lexical form might function as the default structure as observed in L1-English speakers' performance in Juffs (1996) and the current AJT. Such knowledge could transfer from Spanish in TES speakers since it also allows both forms. That is, with exposure to and knowledge of another non-native language that has both causative structures, TES participants recognized that one was the default option and thus showed a pattern that mirrored L1-English speakers' preference. However, the rating difference between the two forms was smaller in TES speakers than in L1-English speakers. This might be due to the fact that TES speakers experienced simultaneous transfer from both L1 Thai and L3 Spanish, where the former exerted negative influence and the latter positive influence on L2 English. Similar to the rating pattern, descriptive data from the VTT suggests that TES speakers performed slightly better than TE speakers in translation accuracy of causative psych verbs: 61.2% (TES) vs. 55.5% (TE). The more targetlike performance in the AJT and more correct translation instances in the TES group are likely indicative of an L3 cumulative effect. Recall that the current study is likely underpowered and the interpretation above is based on descriptive statistics. A larger sample size could help confirm whether it is valid.

The present study is not without limitations. TES speakers were compared to TE speakers with the former likely performing better than the latter. This multilingual advantage is attributed to cumulative regressive transfer from L3 Spanish. However, comparing TE (bilingual) to TES (multilingual) speakers might not be an ideal practice for the investigation of the L3 cumulative effect. The performance of TES speakers might reflect a multilingualism effect (Velnić et al., 2025), rather than L3 regressive transfer. According to Kemp (2001), multilingual speakers develop higher metalinguistic awareness than bilingual speakers do. It is thus also possible that L3 speakers' performance, which shared the pattern with L1-English speakers' in descriptive statistics, is not due to positive influence from the L3 but heightened metalinguistic awareness. It is thus more reasonable and precise to compare two groups of L3 speakers to control for the degree of metalinguistic awareness to avoid the multilingualism effect as a confounding factor.

According to Velnić and colleagues (2025), exposure to an additional language which resembles a previously acquired non-native language is sufficient for multilingual speakers to show regressive crosslinguistic influence. This observation came from L3-Norwegian participants who were also tested in L3 Norwegian reported in their previous study (Velnić et al., 2023) and performed better than L2-English participants in their 2025 study despite their non-targetlike performance in L3 Norwegian. However, Puig-Mayenco (2023) argues that having targetlike knowledge in the L3 is an important factor for multilinguals to show transfer from the L3 to the L2. The present study did not test TES speakers' knowledge of Spanish causative psych verbs. The data could thus have come from both participants that had acquired the structure in L3 Spanish and those who had not. The current research could not confirm either Velnić and colleagues' (2025) explanation or Puig-Mayenco's (2023) argument. Recall that the former suggests

that targetlike performance is not necessary and exposure to a similar structure in a new language suffices for transfer from the L3 to occur. The latter stance, however, requires targetlike knowledge in the L3.

6. Conclusion

The present study revealed that, despite no statistically significant difference, L3 speakers descriptively patterned with L1-English speakers and differed from L2 speakers in the acquisition of English causative psych verbs. The behavior of L3 speakers is interpreted as possible evidence of regressive transfer from causative psych verbs in L3 Spanish to L2 English, enhancing their L2 syntactic representation. The results might also show the effect of multilingualism rather than the L3 cumulative effect. Importantly, the unique pattern of L2 English in L3 speakers indicates that multilingual speakers develop a distinct multilingual system. The findings highlight not only the multidirectionality of crosslinguistic influence in multilingual speakers but also the uniqueness of multilingual speakers' grammars. That is, with the same L1 and L2, the L2 of L3 speakers seems to be different from that of L2 speakers, whether it be because of heightened metalinguistic awareness or cumulative regressive transfer.

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