Appendix 8: Additional SEM Analysis

One of the reviewers astutely pointed out that the knowledge of active/passive and causative target structures included in our SK tests is not purely syntactic, but partially lexical. According to the reviewer, the inclusion of these target structures may have created an overlap between the measurement of VK and SK in our study, which in turn, may have influenced the findings in SEM Model 1 reported in the main manuscript. To explore this issue empirically, we tested alternative SEM models to Model 1 by excluding the results from these two target structures (i.e., active/passive and causative).

Table 1 presents the fit indices for SEM Model 2, which includes results of only three syntactic target structures of subject/object relative clauses, passive object relative clauses, and hypothetical sentences. The indices in Table 1 show that Models 2 fit the data as well as Model 1 (the one retained in the main manuscript). Also, as seen in Figure 1 below, examining the regression paths from VK and SK to the listening factor (and all the other paths) and their loadings, bring us to the same conclusions as reported in the main manuscript.

Also, to keep analyses in the current appendix consistent with the ones in the main manuscript, we tested SEM Model 3, in which, the regression paths of the VK and SK factors to the listening factor were set to be equal, and we examined whether the difference between VK and SK contribution to the listening factor was statistically significant. Model 3 was compared to Model 2 via a scaled chi-square difference test, and the result was not statistically significant. This finding is also the same as the one reported in the main manuscript.

Table 1

Index	CFI	NFI	NNFI	GFI	RMSEA	SRMR	Chi-square
Criterion	**≥ .95**	**≥ .90**	**≥ .95**	**≥ .90**	**≤ .06**	**≤ .08**	**None significant**
Model 1 with all five structures	.98	.96	.97	.92	.07	.06	*$\chi2$ = 189.65 , *df* = 79
Model 2 with only three structures	.95	.94	.95	.92	.08	.05	*$\chi2$ = 197.96, *df* = 79
Model 3 with equal SK and VK	.95	.94	.95	.92	.08	.05	*$\chi2$ = 198.07, *df* = 80
Chi-square Difference test between Models 2 and 3							$\chi2$= .11, *df* = 1, *P*-value > .05

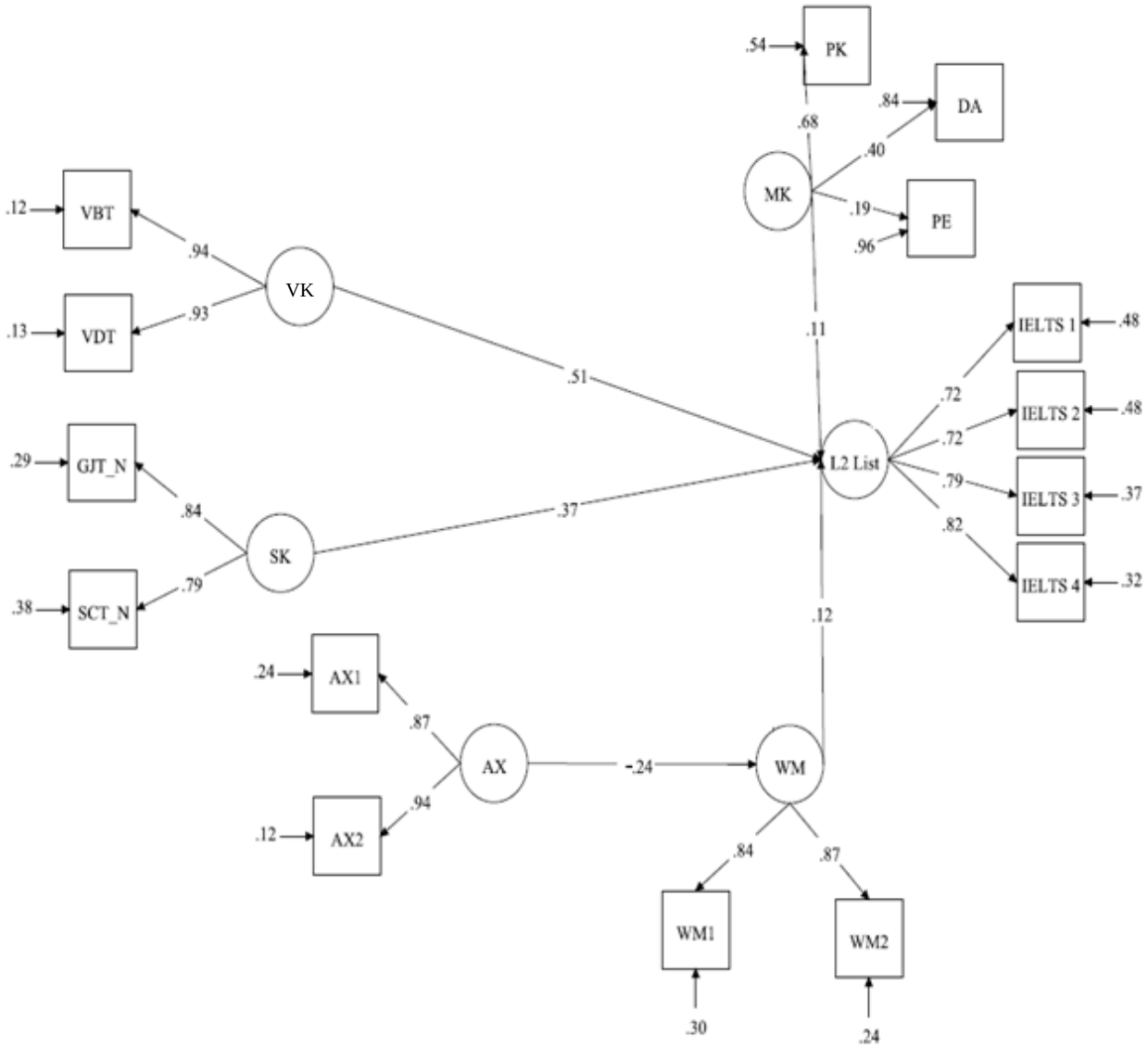

Figure 1: SEM Model 2 with Three Target Structures