

# コンピュータ介在型英語学習[VEP]における目標志向性と学習方略へのシリアル媒介アプローチ

Dr. Damian Rivers, Dr. Michiko Nakamura, Dr. Michael Vallance



メタ学習センター  
Center for Meta-Learning

## Rationale

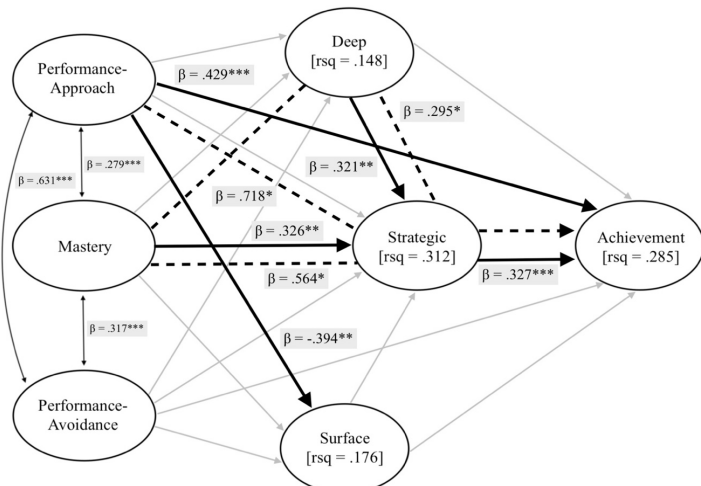
新型コロナウイルスのパンデミック(COVID-19)の影響により、世界中でコンピュータ介在型学習ソリューションへの取り組みが増している。これにより、コンピュータを介した学習者が、動機付けやメタ認知的な面で特有の問題に直面することとなり、その結果、自己調整、学び、達成度への注目も高まっている。達成度の予測においてモチベーションと学習方略が中心的な役割を担うことが指摘されている。本研究では、シリアル媒介アプローチを使い、学習方略の媒介的役割と目標志向性が達成度に及ぼす影響を検証した。参加者は、24ヶ月にわたってオンラインで行われる外国語としての英語(EFL)という必修科目を履修する大学生195名である。分析の結果、検証モデルとデータの適合度が高く、達成度の分散の28.5%を説明するもであった。パフォーマンス目標志向性と達成度の間に直接効果が観察され、方略的学習アプローチが部分媒介することがわかった。一方、マスタリー目標志向性と達成度の間には方略的学習アプローチが完全媒介しており、その他、深層学習アプローチと方略的学習アプローチも完全媒介変数であることが明らかになった。EFL教育においてコンピュータ媒介型学習ソリューションが直面する課題と、学生の適応的なモチベーションや学習アプローチを促進・支援し、さらにそれが高く評価される経験を持たせることの重要性について考察する。

Across the globe computer-mediated learning initiatives have increased due to the novel coronavirus pandemic (COVID-19). This creates implications for self-regulation, learning and achievement as computer-mediated learners face unique motivational and metacognitive demands. Motivation and learning strategies are central to achievement. The current research uses a serial-mediation approach to test the effect of goal orientations on achievement in addition to the mediation role of learning strategies among 195 university students on a compulsory 24-month computer-mediated English as a foreign language (EFL) course. The tested model showed a good fit to the data and accounted for 28.5% of the shared achievement variance. Direct effects were observed between a performance-approach orientation and achievement. Mediation effects were also observed between a performance-approach orientation and achievement via a strategic approach to learning. In contrast, the effect of a mastery orientation on achievement was fully mediated via a strategic approach to learning. A fully mediated serial effect was also observed between a mastery orientation and achievement via a deep and strategic approach to learning. The challenges facing computer-mediated learning solutions in EFL education and the importance of experiences that facilitate, support and reward adaptive motivations and approaches to learning are discussed.

## Full Structural Model Hypotheses Testing

Construct	AVE	CR	1	2	3	4	5	6	7
1. Performance-Approach	.64	.84	<u>.80</u>						
2. Mastery	.73	.89	.24**	<u>.85</u>					
3. Performance-Avoidance	.68	.86	.53**	.28**	<u>.82</u>				
4. Deep	.49	.74	.15*	.29**	.17*	<u>.70</u>			
5. Strategic	.54	.77	.29**	.35**	.28**	.35**	<u>.73</u>		
6. Surface	.48	.74	-.31**	-.06	-.23**	-.28**	-.12	<u>.69</u>	
7. Achievement	.53	.81	.35**	.22**	.14*	.17*	.34**	-.14*	<u>.73</u>

Table 1. Reliability and validity statistics (underlined values represent discriminant validity)



$\chi^2=254.234$  (df=187)  $p=0.001$ , NC=1.360, TLI=0.957, CFI= 0.965, RMSEA= 0.043

- The mastery orientation did not have a direct effect on achievement which reflects prior studies using the two other goal orientations as concurrent outcome predictors (see Elliot & Murayama 2008). Only the performance-approach orientation had a direct effect on achievement.
- The computer-mediated learning environment is therefore established in the self-regulatory framework of the learner as primarily concerned with a competition for limited achievement resources.
- This reflects prior research in which the performance-approach orientation is adaptive in terms of its effect on achievement within competitive environments and those dominated by male learners (see Bouffard et al. 1995).
- An implication of this relates to findings suggesting that competitive peer-referenced motivations are ultimately destructive in the longer term (Rawsthorne & Elliot 1999).
- Learners who adopt a performance-approach orientation are also likely to hold a performance-avoidance orientation at some point (note the significant positive correlation between these two orientations).
- This caution is particularly applicable to students with lower levels of proficiency in order to avoid promoting helplessness via repeated unsuccessful outcomes generated through peer-referenced comparison.
- This caution is also applicable to learners with high academic self-efficacy who are at risk from becoming performance-avoidance orientated once the performance-approach motivation ceases to provide satisfactory peer-referenced feedback (Middleton, Kaplan & Midgley 1998).