

La influencia del aprendizaje autorregulado en el aprendizaje online

A/Professor Jaclyn Broadbent





Aprendizaje autorregulado

"Se refiere a pensamientos, sentimientos y acciones autogenerados que se planifican y adaptan cíclicamente al logro de metas personales"
(Zimmerman 2000 p.14)

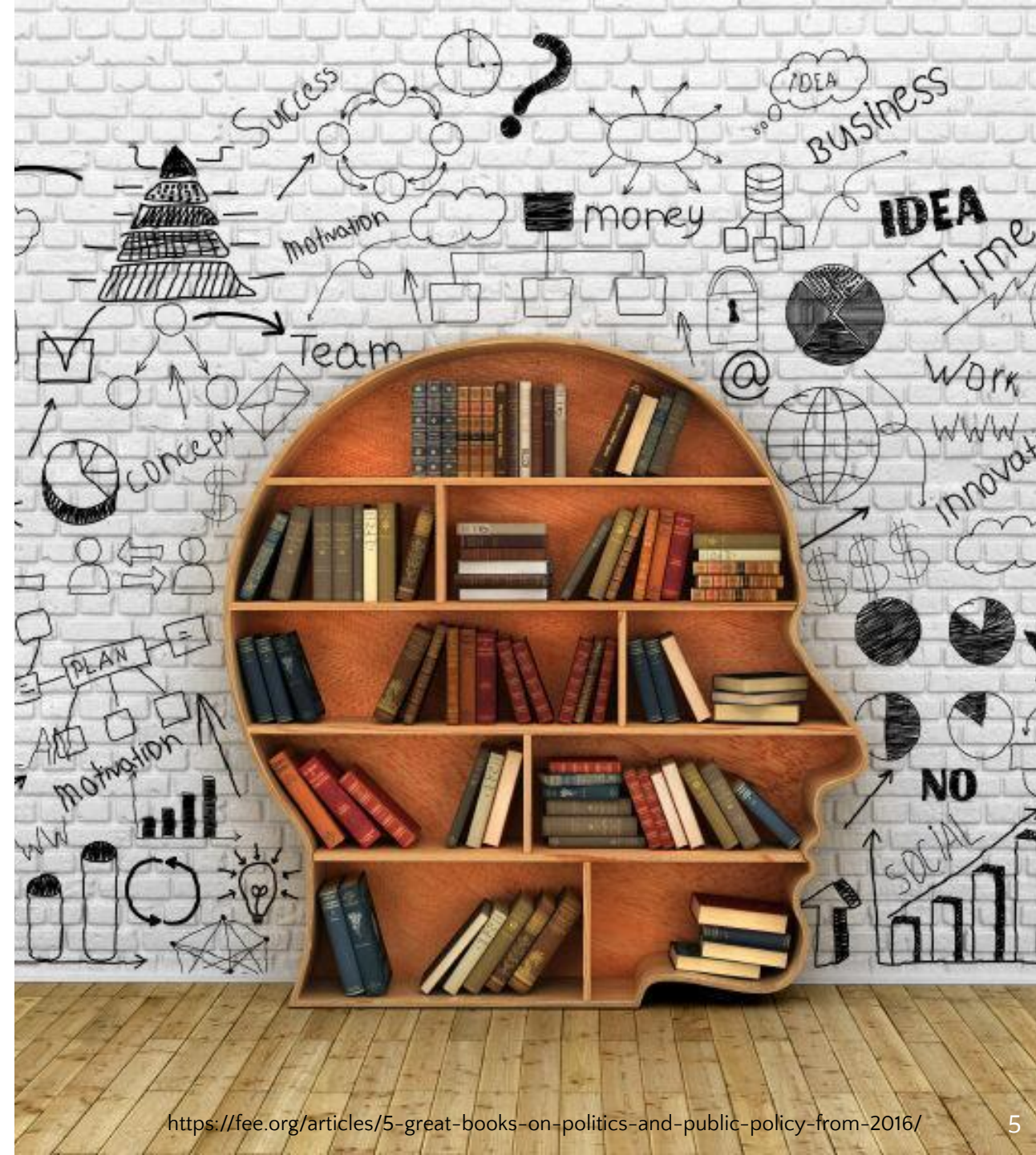


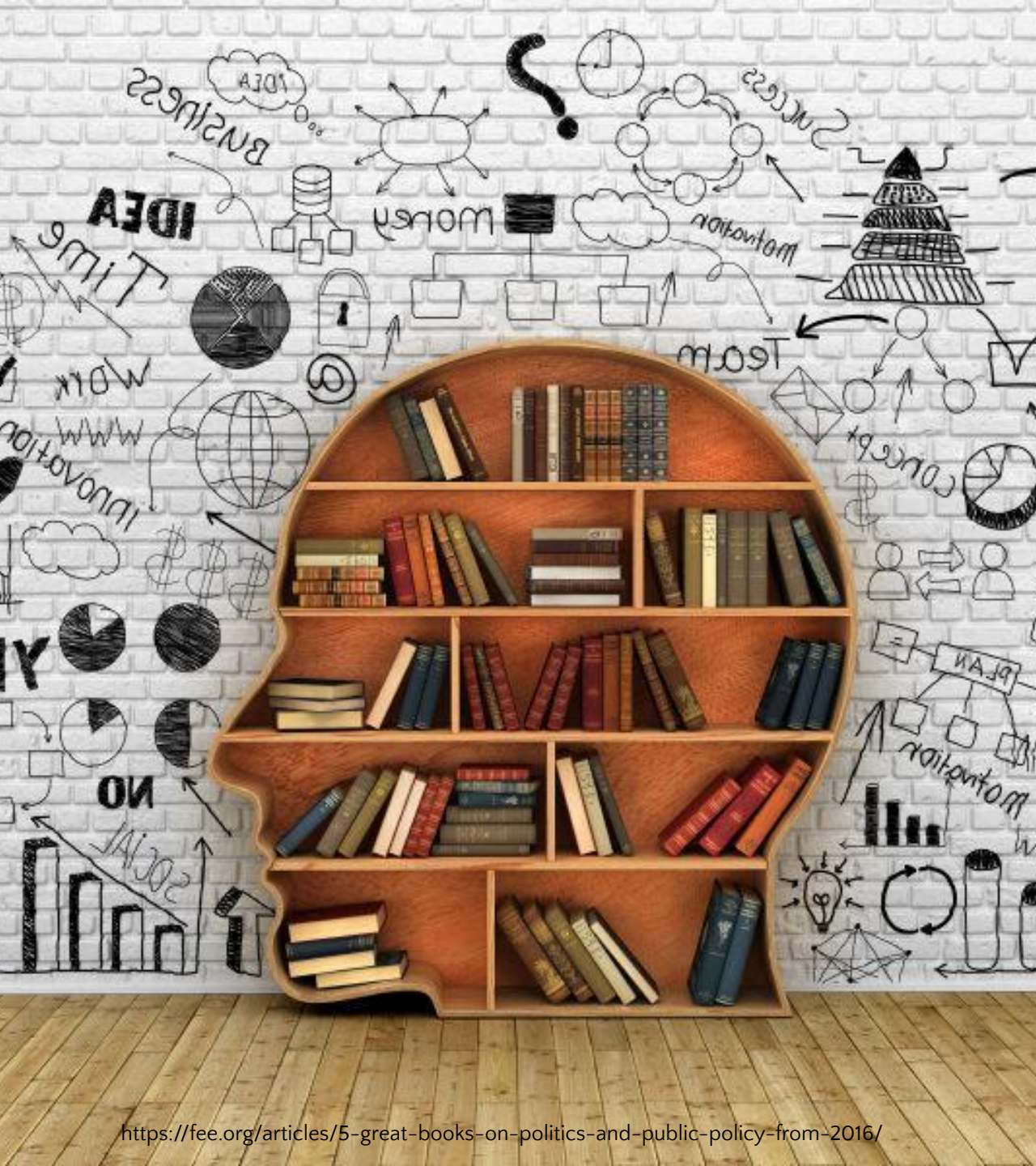
¿Los estudiantes usan estrategias de aprendizaje autorregulado de manera diferente en línea?



Estudio 1

Broadbent, J., & Poon, W. L. (2015). Self-regulated learning strategies & academic achievement in online higher education learning environments: A systematic review. *The Internet and Higher Education*, 27, 1-13.





- Gestión del tiempo
- Metacognición
- Regulación del esfuerzo
- Pensamiento crítico
- Aprendizaje entre pares
- Elaboración
- Ensayo
- Organización
- Ayuda buscando

Review of the literature

Gap 1: There had been no review of the relationship between SRL strategy use and academic performance for online learners.

Study 1
Broadbent, J., & Poon, W. L. (2015). Self-regulated learning strategies & academic achievement in online higher education learning environments: A systematic review. *The Internet and Higher Education*, 27, 1-13.

Gap 2: There is variation between studies regarding which SRL strategies have been evaluated in relation to the academic performance of online learners.

Gap 3: Few studies directly compared SRL use and subsequent academic performance in online vs blended learning contexts.

Gap 4: Much of the literature assumes SRL factors work uniformly across students and context.

Study 2
Broadbent, J. (2017). Comparing online and blended learner's self-regulated learning strategies and academic performance. *The Internet and Higher Education*, 33, 24-32.

Study 3
Broadbent, J., Sharman, S., Panadero, E., & Fuller-Tyszkiewicz, M. (2021). How does self-regulated learning influence formative assessment and summative grade? Comparing online and blended learners. *The Internet and Higher Education*, 50.

Study 4
Broadbent, J. & Fuller-Tyszkiewicz (2018). Profiles in Self-Regulated Learning and their correlates for online and blended learning students. *Educational Technology Research and Development*, 66(6), 1435-1455.

Research Question 1: what self-regulated learning strategies do academically successful online learners report using?

Gap 5: Some SRL intervention approaches exist within the classroom context, but less is known about online interventions.

Study 5
Broadbent, J., Panadero, E., Lodge, J.M. & de Barba, P. (2020). *Technologies to enhance self-regulated learning in online and computer-mediated learning environments.* In M. Spector, M.D. Merrill, J. Elen & M.J. Bishop (Eds.). *Handbook of Research on Educational Communications and Technology.* Springer, Cham.

Gap 6: There is a need to test an online SRL enhancement program that addresses some of the challenges of implementing successful online interventions.

Study 6
Broadbent, J., Panadero, E. & Fuller-Tyszkiewicz, M. (2020). Effects of mobile-app learning diaries vs online training on specific self-regulated learning components. *Educational Technology Research and Development*, 68, 2351-2372.

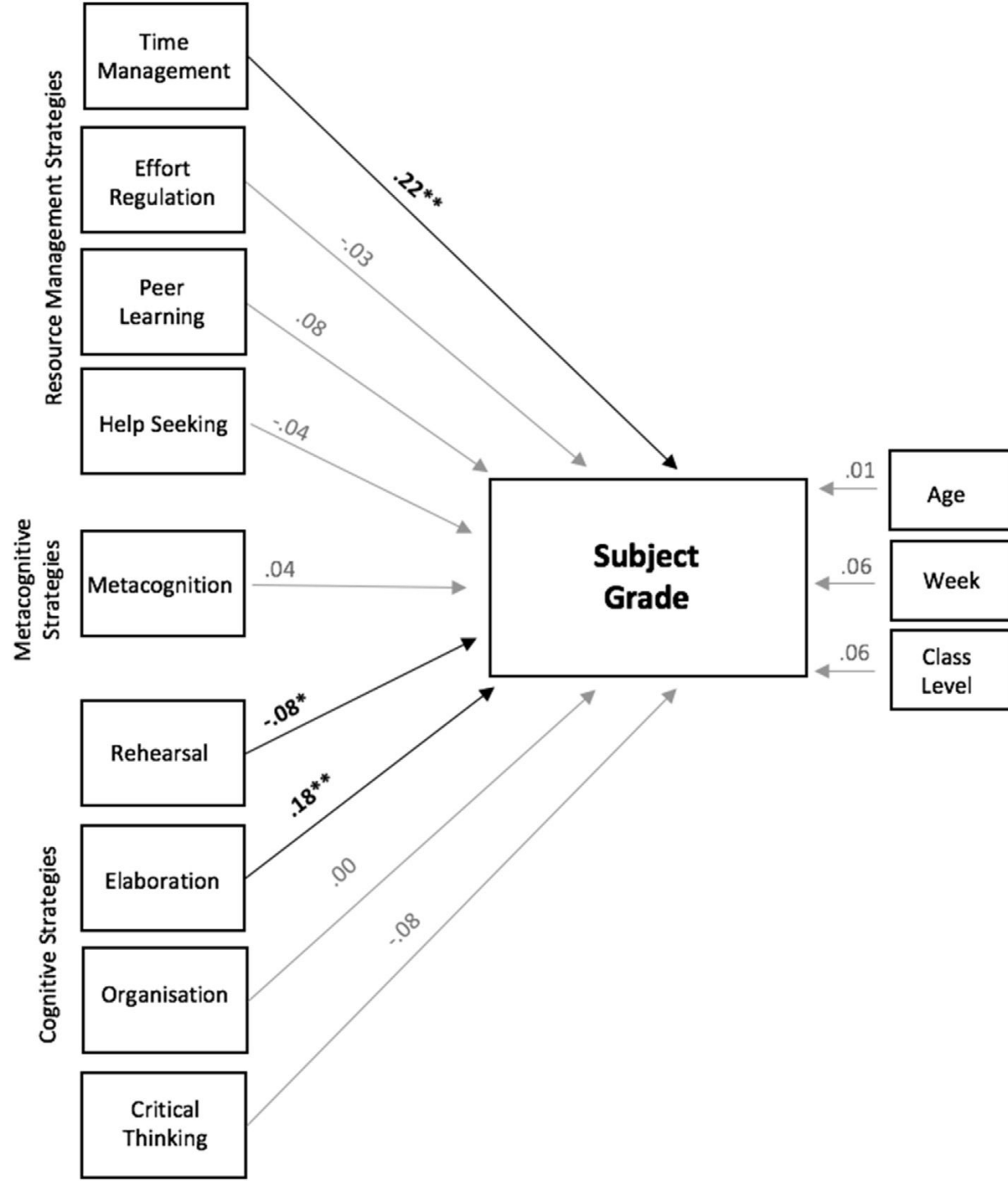
Research Question 2: can SRL strategy use be improved with an online intervention?



<https://www.bostonglobe.com/opinion/editorials/2017/11/27/online-learning-can-ease-economic-inequality/Z4TYVHIX6GuSR7pYjEopnK/story.html>

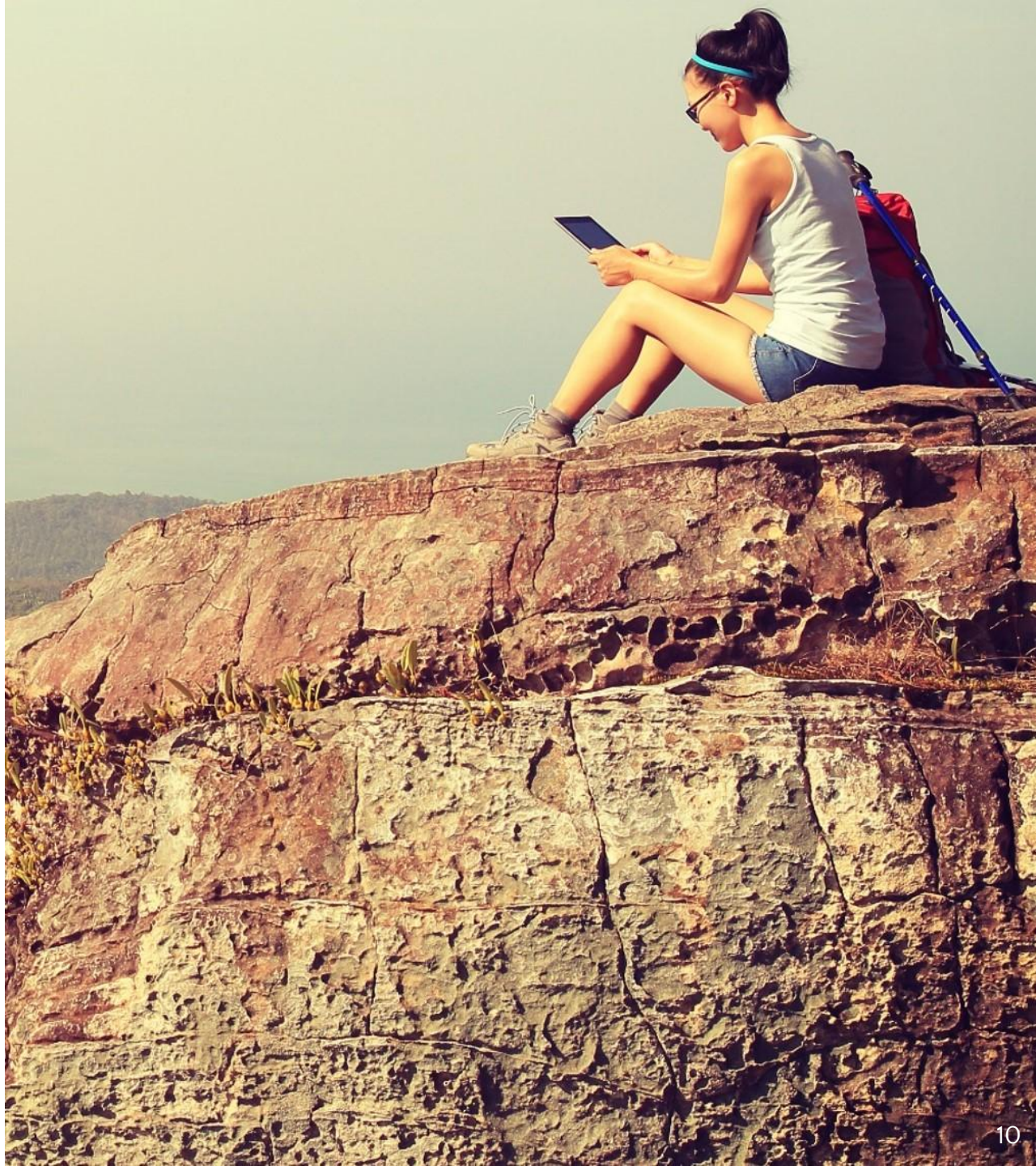
Estudio 2 2:

Broadbent, J. (2017). Comparing online and blended learner's self-regulated learning strategies and academic performance. *The Internet and Higher Education*, 33, 24-32



Estudio 3: Escenario de Aprendizaje Específico

Broadbent, J., Sharman, S. Panadero, E & Fuller-Tyszkiewicz, M. (2021). How does self-regulated learning influence formative assessment and summative grade? Comparing online and blended learners.



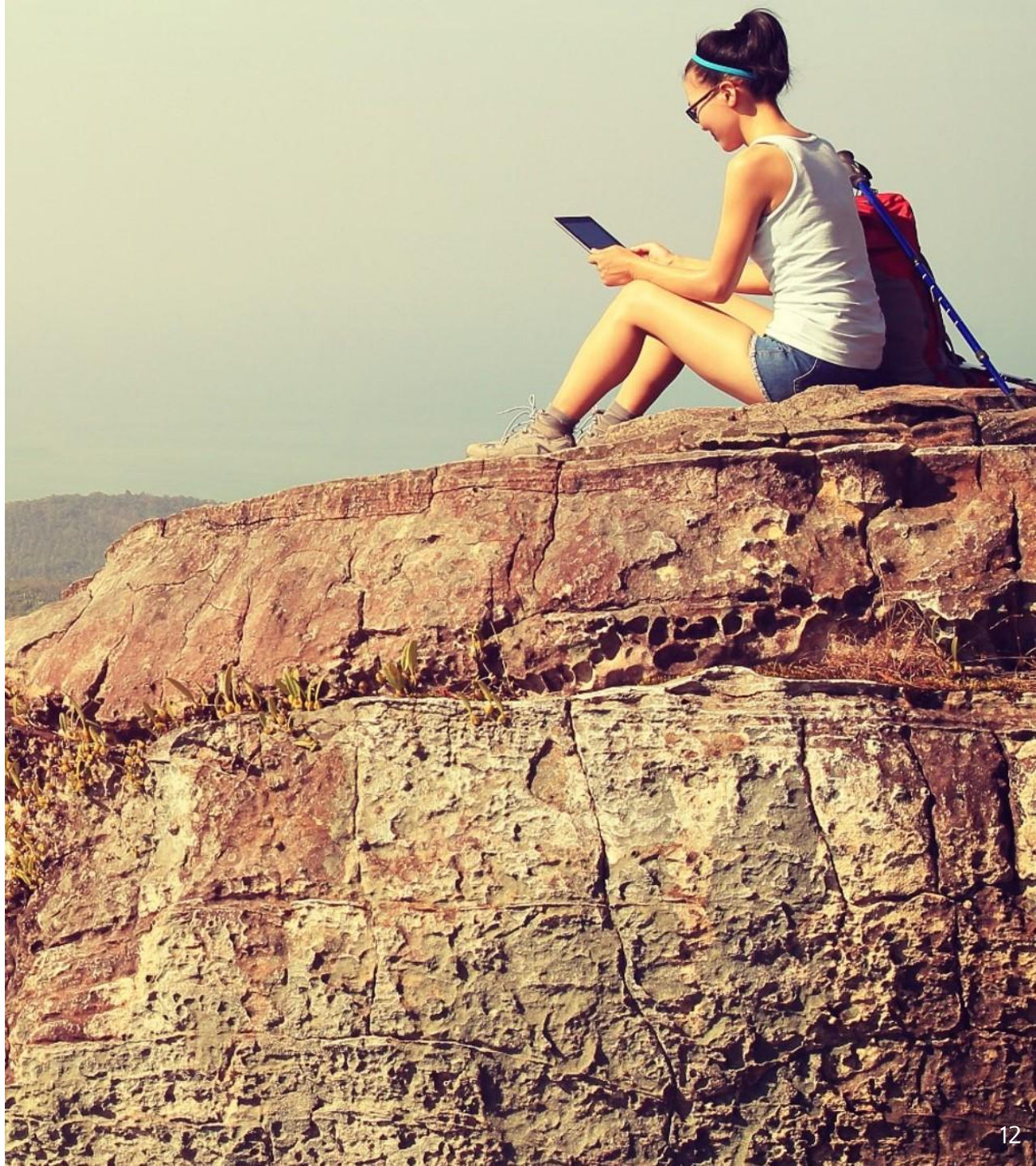


Aparte...

**Honicke, T., & Broadbent, J. (2016).
The influence of academic
self-efficacy on academic
performance: A systematic
review. Educational Research
Review, 17, 63–84.**

Estudio 3: Escenario de Aprendizaje Específico

Broadbent, J., Sharman, S. Panadero, E & Fuller-Tyszkiewicz, M. (2021). How does self-regulated learning influence formative assessment and summative grade? Comparing online and blended learners.





Escenario de Aprendizaje Específico

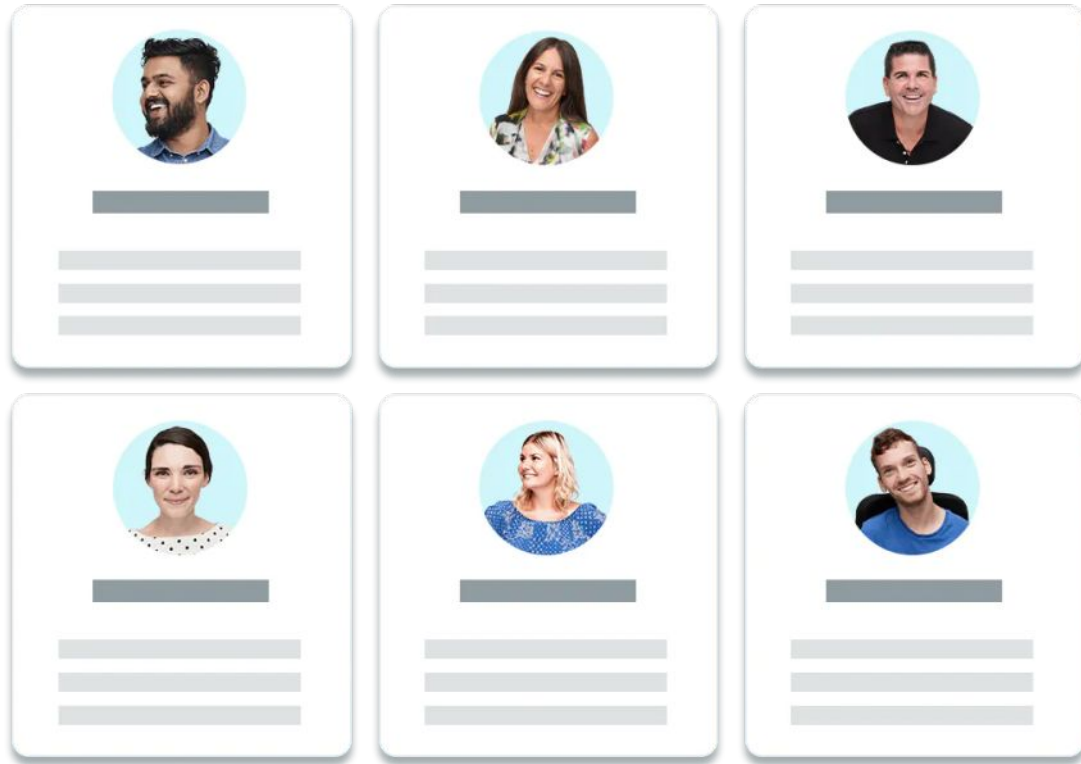
Los estudiantes en línea obtuvieron calificaciones más altas que los estudiantes mixtos en todas las variables

No hubo diferencia en las calificaciones entre los estudiantes en línea y mixtos.

En promedio, ambos grupos mejoraron ~ 15%

La gestión del tiempo, la regulación del esfuerzo y la autoeficacia para predecir mejor el rendimiento académico de los estudiantes en línea.

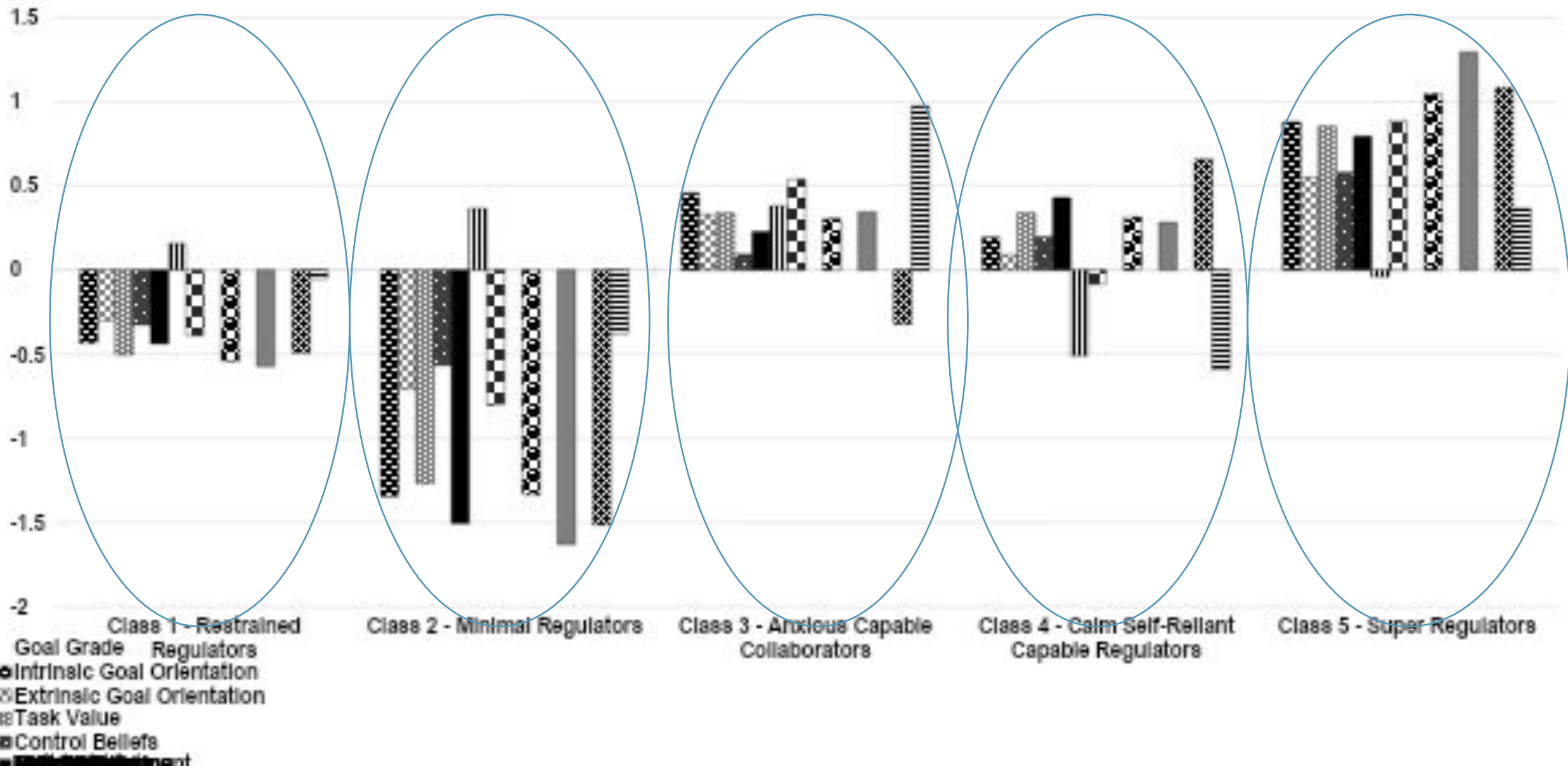
La regulación del esfuerzo y la autoeficacia para predecir mejor el rendimiento académico de los aprendices combinados.



<https://hireup.com.au/tips-for-profiles/>

Estudio 4: Perfiles SRL

Broadbent, J., & Fuller-Tyszkiewicz, M. (2018). Profiles in self-regulated learning and their correlates for online and blended learning students. *Educational technology research and development*, 66(6), 1435-1455.



	Clase 1 Reguladores restringidos^a	Class 2 Reguladores Mínimos^b	Clase 3 Colaboradores Capaces ansiosos^c	Clase 4 Reguladores calmados capaces de autosucuencia^d	Clase 5 Super Reguladores^e
Edad	22.03 ^{d,e}	21.50 ^{d,e}	21.64 ^{d,e}	25.59 ^{a,b,c}	26.00 ^{a,b,c}
Calificación	71.51 ^{b,d,e}	64.48 ^{a,c,d,e}	71.12 ^{b,d,e}	76.02 ^{a,b,c}	76.17 ^{a,b,c}
Intencion	16.23 ^{b,c,d,e}	14.63 ^{a,c,d,e}	16.89 ^{a,b,d,e}	18.57 ^{a,b,c,e}	19.45 ^{a,b,c,d}
Automaticidad	10.32 ^{b,d,e}	8.06 ^{a,c,d,e}	11.17 ^{b,d,e}	12.41 ^{a,b,c,e}	14.68 ^{a,b,c,d}
Mujeres[^]	.82 ^e	.85	.79 ^e	.88	.94 ^{a,c}
En Campus[^]	.86 ^{d,e}	.83 ^{d,e}	.87 ^{d,e}	.68 ^{a,b,c}	.60 ^{a,b,c}

[^] Denota variables categóricas para las que los valores medios informados oscilan entre 0 y 1 y representan proporciones (es decir, 0,4 para mujeres indica que el 40% de los participantes en una clase determinada son mujeres). Las comparaciones post-hoc se ajustaron para la inflación del error de Tipo I

Review of the literature

Gap 1: There had been no review of the relationship between SRL strategy use and academic performance for online learners.

Study 1
Broadbent, J., & Poon, W. L. (2015). Self-regulated learning strategies & academic achievement in online higher education learning environments: A systematic review. *The Internet and Higher Education*, 27, 1-13.

Gap 2: There is variation between studies regarding which SRL strategies have been evaluated in relation to the academic performance of online learners.

Gap 3: Few studies directly compared SRL use and subsequent academic performance in online vs blended learning contexts.

Gap 4: Much of the literature assumes SRL factors work uniformly across students and context.

Study 2
Broadbent, J. (2017). Comparing online and blended learner's self-regulated learning strategies and academic performance. *The Internet and Higher Education*, 33, 24-32.

Study 3
Broadbent, J., Sharman, S., Panadero, E., & Fuller-Tyszkiewicz, M. (2021). How does self-regulated learning influence formative assessment and summative grade? Comparing online and blended learners. *The Internet and Higher Education*, 50.

Study 4
Broadbent, J. & Fuller-Tyszkiewicz (2018). Profiles in Self-Regulated Learning and their correlates for online and blended learning students. *Educational Technology Research and Development*, 66(6), 1435-1455.

Research Question 1: what self-regulated learning strategies do academically successful online learners report using?

Gap 5: Some SRL intervention approaches exist within the classroom context, but less is known about online interventions.

Study 5
Broadbent, J., Panadero, E., Lodge, J.M. & de Barba, P. (2020). *Technologies to enhance self-regulated learning in online and computer-mediated learning environments*. In M. Spector, M.D. Merrill, J. Elen & M.J. Bishop (Eds.). *Handbook of Research on Educational Communications and Technology*. Springer, Cham.

Gap 6: There is a need to test an online SRL enhancement program that addresses some of the challenges of implementing successful online interventions.

Study 6
Broadbent, J., Panadero, E. & Fuller-Tyszkiewicz, M. (2020). Effects of mobile-app learning diaries vs online training on specific self-regulated learning components. *Educational Technology Research and Development*, 68, 2351-2372.

Research Question 2: can SRL strategy use be improved with an online intervention?



Estudio 5

Study 5: Broadbent, J., Panadero, E., Lodge, J. M., & de Barba, P. (2020). Technologies to Enhance Self-Regulated Learning in Online and Computer-Mediated Learning Environments. In Handbook of Research in Educational Communications and Technology (pp. 37-52). Springer, Cham.



- 1 Inferir procesos (meta)cognitivos de SRL a través de datos de comportamiento
- 2 Efectos inexplorados de las intervenciones de SRL sobre el aprendizaje y el desempeño
- 3 Capturando todo el proceso de SRL con todas sus fases en lugar de segmentos
- 4 Intervenciones específicas o inespecíficas del dominio
- 5 Decisión del agente de cambio
- 6 Capacidad de las intervenciones de SRL basadas en tecnología para mejorar el desarrollo independiente de SRL de los estudiantes



Estudio 6: Intervención SRL

Broadbent, J., Panadero, E., & Fuller-Tyszkiewicz, M. (2020). Effects of mobile-app learning diaries vs online training on specific self-regulated learning components. *Education Technology Research and Development*.

Estudio de control aleatorizado con 4 condiciones

Entrenamiento en línea independiente de la disciplina

Tres sesiones de 60 a 90 minutos durante 21 días

$n=16$

Diarios independientes de la disciplina basados en aplicaciones móviles

Completado diariamente durante 21 días.

$n=21$

Entrenamientos y diarios combinados

Tres sesiones de entrenamiento de 60-90 minutos durante 21 días + Diarios diarios durante 21 días

$n=14$

Control

Los estudiantes no participaron en ninguna intervención.

$n=22$



- Knowledge
- Intrinsic G.O.
- Extrinsic G.O.
- Task value
- Control
- Unlabeled

Los participantes en la condición combinada mejoraron las estrategias cognitivas (elaboración, organización y pensamiento crítico), metacognitivas y de gestión de recursos (gestión del tiempo y regulación del esfuerzo) más que otras condiciones.





EN RESUMEN

¿QUÉ SIGUE?

Algunas referencias mencionadas

Broadbent, J., & Poon, W. L. (2015). Self-regulated learning strategies & academic achievement in online higher education learning environments: A systematic review. *The Internet and Higher Education*, 27, 1-13.

Broadbent, J. (2017). Comparing online and blended learner's self-regulated learning strategies and academic performance. *The Internet and Higher Education*, 33, 24-32

Broadbent, J., Sharman, S. Panadero, E & Fuller-Tyszkiewicz, M. (*under review*). How does self-regulated learning influence formative assessment and summative grade? Comparing online and blended learners.

Broadbent, J., & Fuller-Tyszkiewicz, M. (2018). Profiles in self-regulated learning and their correlates for online and blended learning students. *Educational technology research and development*, 66(6), 1435-1455.

Broadbent, J., Panadero, E., Lodge, J. M., & de Barba, P. (2020). Technologies to Enhance Self-Regulated Learning in Online and Computer-Mediated Learning Environments. In *Handbook of Research in Educational Communications and Technology* (pp. 37-52). Springer, Cham.

Broadbent, J., Panadero, E., & Fuller-Tyszkiewicz, M. (2020). Effects of mobile-app learning diaries vs online training on specific self-regulated learning components. *Education Technology Research and Development*.

Honicke, T., & Broadbent, J. (2016). The influence of academic self-efficacy on academic performance: A systematic review. *Educational Research Review*, 17, 63-84.