

Estudo de impacto em Portugal

- ✓ **Âmbito da intervenção:** Pós Doutoramento, Universidade do Minho e apoio da Fundação para a Ciência e Tecnologia (SFRH/BPD/80825/2011)
- ✓ **Objetivos:** avaliar os efeitos do FPSPI™ em adolescentes portugueses, considerando competências criativas variadas – Fluência, Originalidade, Elaboração, Abstração dos Títulos, Resistência ao Fechamento e Forças Criativas, assim como uma classificação genérica de criatividade.
- ✓ **População do estudo:** 131 alunos do 3º ciclo do Ensino Básico português (grupo experimental: 67; grupo controlo: 64), alunos de duas escolas privadas, nomeadamente nas cidades de Porto e de Lisboa
- ✓ **Idades e género:** 12 e os 15 anos ($M = 13,08$; $DP = 0,888$). distribuição por género: Grupo experimental - 36 raparigas e 31 rapazes; Grupo de controlo - 36 raparigas e 28 rapazes
- ✓ **Instrumentos utilizados:**

Para a avaliação da criatividade, foi aplicado o **TTCT® - Testes de Pensamento Criativo de Torrance**, Versão Figurativa (Forma A), adaptada a Portugal (Azevedo, 2007). Este instrumento é considerado internacionalmente como o mais usado, estudado e validado para a avaliação do constructo (Beghetto & Breslow, 2013; Runco, Millar, Acar, & Cramond, 2010).

Usou-se ainda a **Escala de Perceções sobre a Eficácia do FPSPI™**, recentemente elaborada (Azevedo, Morais & Martins, submetido). A partir de pesquisa sobre o FPSPI™, foram listados 40 indicadores de variáveis passíveis de serem promovidas pelo programa. Os indicadores eram ilustrativos das áreas cognitivas (ex.: Encontrar conexões entre temas diferentes), emocional (ex.: Motivação intrínseca) e interpessoal (ex.: Relacionamento interpessoal empático).

✓ Resultados

Os resultados vêm reforçar os efeitos positivos de programas de treino face a competências de resolução criativa de problemas.

Por fim, face a indicadores escolhidos por mentores experientes do FPSPI™ e posteriormente validados estatisticamente (como motivação para aprender, gestão do tempo, criatividade ou lidar com a competição), os participantes demonstraram perceções de eficácia do programa muito positivas.

Artigo “[The Future Problem Solving Program International: An intervention to promote creative skills on Portuguese adolescents](#)”

Outros estudos internacionais

vêm fundamentar os resultados obtidos, como se pode verificar na tabela abaixo, que descreve as competências desenvolvidas pelo CriAtividade (Future Problem Solving e Destination Imagination)

Competências	Fundamentação
Interesse pelo futuro positivo de todos	<p>Jackson, J. B. & Crandell, L. & Menhennett, L. (1997). Pag. 33- 39, Future Problem Solving Connecting the Present to the Future. [Washington D.C.] : Distributed by ERIC Clearinghouse</p> <p>Treffinger, D. J., Selby, E. C., & Crumel, J. H. (2012). Evaluation of the future problem solving program international (FPSP). IJCPs-International Journal of Creativity and Problem Solving, 22(2), 45.</p> <p>Czerwiec, I. T. (1992). An analysis of the future Problem Solving Program and its impact on Massachusetts participants (Doctoral Dissertation). Massachusetts: University of Massachusetts, Education Department.</p>
Confiança na resolução de problemas	<p>Volk, V. (2008). A Global Village Is a Small World. Roper Review, 30, 39-44.</p> <p>Treffinger, D. J., Selby, E. C., Schoonover, P. F. (2014). <i>Destination ImagiNation® Program Evaluation</i> (Phase I Report). Retrieve from Center for Creative Learning: https://www.destinationimagination.org/wp-content/uploads/2016/02/2004-Center-for-Creative-Learning-DI-Report.pdf</p>

Competências	Fundamentação
Lidar com assuntos complexos	<p>Jackson, Jennine B. & Crandell, Lisa. & Menhennett, Lorien. (1997). Pag. 33- 39, Future Problem Solving Connecting the Present to the Future. [Washington D.C.] : Distributed by ERIC Clearinghouse,</p> <p>Volk, V. (2008). A Global Village Is a Small World. Roper Review, 30, 39-44.</p>
Criatividade (ter muitas ideias, diferentes e originais)	<p>Jackson, Jennine B. & Crandell, Lisa. & Menhennett, Lorien. (1997). Pag. 33- 39 Future Problem Solving Connecting the Present to the Future. [Washington D.C.] : Distributed by ERIC Clearinghouse,</p> <p>Cramond, B. L., & Fairweather, E. C. (2013). Future Problem Solving as Education for Innovation. In L. V. Shavinina (Ed.) The Routledge International Handbook of Innovation Education (pp. 215-226). Routledge: London and New York.</p> <p>Treffinger, D. J., Selby, E. C., & Crumel, J. H. (2012). Evaluation of the future problem solving program international (FPSPi). IJCPS-International Journal of Creativity and Problem Solving, 22(2), 45.</p> <p>Czerwiec, I. T. (1992). An analysis of the future Problem Solving Program and its impact on Massachusetts participants (Doctoral Dissertation). Massachusetts: University of Massachusetts, Education Department</p> <p>Development and validation of the Roadrunner Behavioral Rating Scales for identifying participants for the future problem solving program.</p> <p>Volk, V. (2008). A Global Village Is a Small World. Roper Review, 30, 39-44.</p> <p>Treffinger, D. J., Selby, E. C., Schoonover, P. F. (2014). <i>Destination ImagiNation® Program Evaluation</i> (Phase I Report). Retrieve from Center for Creative Learning: https://www.destinationimagination.org/wp-content/uploads/2016/02/2004-Center-for-Creative-Learning-DI-Report.pdf</p>

Competências	Fundamentação
Pensamento crítico (analisar, selecionar e avaliar informação)	<p>Jackson, Jennine B. & Crandell, Lisa. & Menhennett, Lorien. (1997). Pag. 33- 39, Future Problem Solving Connecting the Present to the Future. [Washington D.C.] : Distributed by ERIC Clearinghouse,</p> <p>Treffinger, D. J., Selby, E. C., & Crumel, J. H. (2012). Evaluation of the future problem solving program international (FPSPi). IJPCS-International Journal of Creativity and Problem Solving, 22(2), 45.</p> <p>Czerwiec, I. T. (1992). An analysis of the future Problem Solving Program and its impact on Massachusetts participants (Doctoral Dissertation). Massachusetts: University of Massachusetts, Education Department</p> <p>Volk, V. (2008). A Global Village Is a Small World. Roeper Review, 30, 39-44.</p>
Metacognição	<p>Cramond, B. L., & Fairweather, E. C. (2013). Future Problem Solving as Education for Innovation. In L. V. Shavinina (Ed.) The Routledge International Handbook of Innovation Education (pp. 215-226). Routledge: London and New York.</p> <p>Cramond, B. (2009). Future Problem Solving in gifted education. In L. Shavinna (Ed.). Handbook on Giftedness (Part 2, pp. 1143- 1156). NY: Springer.</p>
Curiosidade	<p>Cramond, B. L., & Fairweather, E. C. (2013). Future Problem Solving as Education for Innovation. In L. V. Shavinina (Ed.) The Routledge International Handbook of Innovation Education (pp. 215-226). Routledge: London and New York.</p>

Competências	Fundamentação
Identificação e comunicação de problemas	<p>Cramond, B. L., & Fairweather, E. C. (2013). Future Problem Solving as Education for Innovation. In L. V. Shavinina (Ed.) The Routledge International Handbook of Innovation Education (pp. 215-226). Routledge: London and New York.</p> <p>Treffinger, D. J., Selby, E. C., Schoonover, P. F. (2014). Destination ImagiNation® Program Evaluation (Phase I Report). Retrieve from Center for Creative Learning: https://www.destinationimagination.org/wp-content/uploads/2016/02/2004-Center-for-Creative-Learning-DI-Report.pdf</p>
Comunicação escrita	<p>Development and validation of the Roadrunner Behavioral Rating Scales for identifying participants for the future problem solving program.</p> <p>Volk, V. (2008). A Global Village Is a Small World. Roper Review, 30, 39-44.</p>
Comunicação verbal	<p>Treffinger, D. J., Selby, E. C., & Crumel, J. H. (2012). Evaluation of the future problem solving program international (FPSPi). IJCPs-International Journal of Creativity and Problem Solving, 22(2), 45.</p> <p>Development and validation of the Roadrunner Behavioral Rating Scales for identifying participants for the future problem solving program.</p> <p>Volk, V. (2008). A Global Village Is a Small World. Roper Review, 30, 39-44.</p>

Competências	Fundamentação
Trabalho em equipa	<p>Jackson, Jennine B. & Crandell, Lisa. & Menhennett, Lorien. (1997). Pag 33- 39, Future Problem Solving Connecting the Present to the Future. [Washington D.C.] : Distributed by ERIC Clearinghouse,</p> <p>Treffinger, D. J., Selby, E. C., & Crumel, J. H. (2012). Evaluation of the future problem solving program international (FPSPI). IJCPs-International Journal of Creativity and Problem Solving, 22(2), 45.</p> <p>Czerwiec, I. T. (1992). An analysis of the future Problem Solving Program and its impact on Massachusetts participants (Doctoral Dissertation). Massachusetts: University of Massachusetts, Education Department</p> <p>Alvino, J. (1993). Teaching our children to solve "fuzzy" problems. PTA Today, 18, 13-14.</p> <p>Treffinger, D. J., Selby, E. C., Schoonover, P. F. (2014). Destination ImagiNation® Program Evaluation (Phase I Report). Retrieve from Center for Creative Learning: https://www.destinationimagination.org/wp-content/uploads/2016/02/2004-Center-for-Creative-Learning-DI-Report.pdf</p>
Interesse por temas diferentes	<p>Treffinger, D. J., Selby, E. C., & Crumel, J. H. (2012). Evaluation of the future problem solving program international (FPSPI). IJCPs-International Journal of Creativity and Problem Solving, 22(2), 45.</p>
Motivação para aprofundar conhecimentos	<p>Cramond, B. L., & Fairweather, E. C. (2013). Future Problem Solving as Education for Innovation. In L. V. Shavinina (Ed.) The Routledge International Handbook of Innovation Education (pp. 215-226). Routledge: London and New York.</p>

Competências	Fundamentação
Capacidade em estabelecer relações entre assuntos diferentes	Treffinger, D. J., Selby, E. C., & Crumel, J. H. (2012). Evaluation of the future problem solving program international (FPSPI) . IJCPs-International Journal of Creativity and Problem Solving, 22(2), 45.
Liderança	Treffinger, D. J., Selby, E. C., & Crumel, J. H. (2012). Evaluation of the future problem solving program international (FPSPI) . IJCPs-International Journal of Creativity and Problem Solving, 22(2), 45.
Gestão de tempo	Treffinger, D. J., Selby, E. C., & Crumel, J. H. (2012). Evaluation of the future problem solving program international (FPSPI) . IJCPs-International Journal of Creativity and Problem Solving, 22(2), 45.
Relacionamento interpessoal empático	Treffinger, D. J., Selby, E. C., & Crumel, J. H. (2012). Evaluation of the future problem solving program international (FPSPI) . IJCPs-International Journal of Creativity and Problem Solving, 22(2), 45. Development and validation of the Roadrunner Behavioral Rating Scales for identifying participants for the future problem solving program.
Lidar com a competição	Cramond, B. L., & Fairweather, E. C. (2013). Future Problem Solving as Education for Innovation . In L. V. Shavinina (Ed.) The Routledge International Handbook of Innovation Education (pp. 215-226). Routledge: London and New York.

Competências	Fundamentação
Aplicar de competências e conhecimentos	Cramond, B. L., & Fairweather, E. C. (2013). Future Problem Solving as Education for Innovation . In L. V. Shavinina (Ed.) The Routledge International Handbook of Innovation Education (pp. 215-226). Routledge: London and New York.
Decisão vocacional	Cramond, B. (2002). The study of creativity in the future. In A. G. Aleinikov (Ed.). The Future of creativity. Bensenville, IL: Scholastic Testing Service, pp. 83-89.
Pensamento estratégico	Cramond, B. L., & Fairweather, E. C. (2013). Future Problem Solving as Education for Innovation . In L. V. Shavinina (Ed.) The Routledge International Handbook of Innovation Education (pp. 215-226). Routledge: London and New York.
Lidar com problemas complexos	Treffinger, D. J., Selby, E. C., & Crumel, J. H. (2012). Evaluation of the future problem solving program international (FPSPI) . IJCPIS-International Journal of Creativity and Problem Solving, 22(2), 45.
Autoconfiança	Cramond, B. L., & Fairweather, E. C. (2013). Future Problem Solving as Education for Innovation . In L. V. Shavinina (Ed.) The Routledge International Handbook of Innovation Education (pp. 215-226). Routledge: London and New York. Treffinger, D. J., Selby, E. C., Schoonover, P. F. (2014). Destination ImagiNation® Program Evaluation (Phase I Report). Retrieve from Center for Creative Learning: https://www.destinationimagination.org/wp-content/uploads/2016/02/2004-Center-for-Creative-Learning-DI-Report.pdf
Motivação para a aprendizagem	Rimm, S., & Olenchak, F.R. (1991, March/April). How FPS helps underachieving gifted students . Gifted Child Today, 19-22.

Competências	Fundamentação
Aprendizagem de conteúdos académicos	<p>Cramond, B. L., & Fairweather, E. C. (2013). Future Problem Solving as Education for Innovation. In L. V. Shavinina (Ed.) The Routledge International Handbook of Innovation Education (pp. 215-226). Routledge: London and New York.</p> <p>Cramond, B. (2009). Future Problem Solving in gifted education. In L. Shavinna (Ed.). Handbook on Giftedness (Part 2, pp. 1143- 1156). NY: Springer.</p>
Pensamento inovador	<p>Cramond, B. L., & Fairweather, E. C. (2013). Future Problem Solving as Education for Innovation. In L. V. Shavinina (Ed.) The Routledge International Handbook of Innovation Education (pp. 215-226). Routledge: London and New York.</p>