VIEW
Literature and Resources

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VIEW Literature and Resources

The major purposes of this bibliography are to present, summarize, and document the literature that supports the use of VIEW: An Assessment of Problem Solving Style℠, and to monitor and update regularly that continuously expanding body of literature. This bibliography will be particularly useful to you if you are searching for:

- A well-established assessment tool supported by scientific evidence beyond an array of promotional claims
- Documentation of theory, research, and applications that differentiate VIEW from alternative assessment options
- Resources from a variety of sources and settings that support the importance and value of VIEW applications in a variety of contexts
- Insights into the "leading edge" and emerging opportunities for research and development that will continue to extend and enhance both inquiry and practice

We have tried to be as thorough as possible, but there may be additional resources that are not included. Please forgive any errors of omission and let us know about any we've missed, so we will be able to include them in future updates.

This bibliography is divided into six main sections: books, manuals, and monographs; published articles and chapters; published reviews; dissertations and theses; conference papers and presentations; and, distance learning resources.

As of June 17, 2020: This bibliography includes:

26 Books, Manuals, and Monographs; 83 Published Articles and Chapters, 2 Published Reviews; 27 Dissertations and Theses; and 1 Distance Learning Module.

Books, Manuals, and Monographs

Aerts, W., Isaksen, S. G., & Isaksen, E. J. (2009). ***Creating more innovative workplaces: Linking problem-solving style and organizational climate.*** **Creativity Research Unit – Technical Report: The Creative Problem Solving Group, Inc.**

The idea that people and their work environments need productive fit is well established, but researchers know very little about potential individual style differences and personal perceptions of the most and least desired work climate for creativity. As a result, as part of a Masters' Thesis (Aerts, 2008) this research explored the relationship between problem- solving style and climates in best and worst-case experiences. Problem-solving style made a difference for some of the dimensions of creative climate; the authors proposed that leaders and managers must take this into account when leading for innovation.

Crumel, J. H., Purifico, R. T., Purifico, S. S., & Selby, E. C. (2011). ***Creating collaborative boards and committees with style.*** **Sarasota, FL: Center for Creative Learning. (Available in PDF format from www.creativelearning.com).**

Everyone who now serves (or has ever served) on an organizational board or committee will recognize the challenges addressed in this booklet. It explores individual style preferences of board or committee members, as might typically be found in churches, homeowner groups, social or fraternal groups, or many other organizations, the ways in which style differences can inhibit or encourage group productivity and teamwork, and practical ways to honor our strengths and differences for more effective results.

Hoßbach, C. (2019). Organizational climate for creativity: Exploring the influence of distinct types of individual differences. Wiesbaden, Germany: Springer Gabler.

Christian's master's thesis was selected as a "best thesis" and is now published in a book or monograph format. See his abstract within the thesis/dissertations section of this document for more information.

Isaksen, S. G. (2012). *VIEW: A decade of collaboration and continuous improvement – Technical Report.* Orchard Park, NY: The Creative Problem Solving Group.

This technical report provides a comprehensive update on VIEW's psychometric qualities and the initial bibliography on works related to the assessment.

Isaksen, S. G., Dorval, K. B., & Treffinger, D. (2011). *Creative approaches to problem solving: A framework for innovation and change* (3rd ed.). Thousand Oaks, CA: SAGE.

This text is a comprehensive, contemporary overview of Creative Problem Solving (CPS). It provides a framework, language, guidelines, and set of easy-to-use tools for understanding challenges, generating ideas, and transforming promising ideas into action. The book includes consideration of the role of style in CPS.

Isaksen, S. G., & Geuens, D. (2006). *A technical report of the relationships between an assessment of problem solving style and creative problem solving.* Orchard Park, NY: The Creativity Research Unit of the Creative Problem Solving Group, Inc.

This study examined the relationships between VIEW and the preference for learning and using of the specific tools, guidelines, stages and components of the current version of creative problem solving. Significant relationships existed between all three dimensions of VIEW and CPS tools, guidelines and stages.

Isaksen, S. G. & Tidd, J. (2006). *Meeting the innovation challenge: Leadership for transformation and growth.* Chichester, UK: Wiley.

This book proposes a new way to look at creative leadership that integrates both leadership and management. It also provides key insights into a new and more systematic way to manage transformation. As a result, the reader will be able to discover a full range of potential outcomes from their change efforts—from radical transformation to incremental improvements.

Purifico, R. T., Crumel, J. H., Purifico, S. S., & Selby, E. C. (2011). *Leading education with style.* Sarasota, FL: Center for Creative Learning. (Available in PDF format from www.creativelearning.com).

Working with colleagues on the challenges of educational leadership and change, school improvement, curriculum planning, or similar tasks can be frustrating or rewarding. This booklet illustrates the importance and benefits of understanding style among educational leaders–from classroom teachers to superintendents and School Board members.

Purifico, S. S., Crumel, J. H., Purifico, R. T., & Selby, E. C. (2011). *YOUR style.* Sarasota, FL: Center for Creative Learning. (Available in PDF format from www.creativelearning.com).

YOU are unique! Each individual brings his or her personal style to countless everyday tasks and interactions. This booklet provides an informal look at three important dimensions of personal style. It offers practical insights to help adolescents or adults understand their style and its importance.

Selby, E. C., Crumel, J. H., Purifico, R. T., & Purifico, S. S. (2011). *Building successful families with style.* Sarasota, FL: Center for Creative Learning. (Available in PDF format from www.creativelearning.com).

Family members often have contrasting personal problem-solving styles. Their differences can create challenges for problem solving and communication, but can also be a source of strength. This booklet offers practical ideas for understanding and using each person's style preferences to build and maintain strong family relationships.

Selby, E. Treffinger, D., & Isaksen, S. (2002). *VIEW: An assessment of problem solving style.* Sarasota, FL. Center for Creative learning, Inc.

VIEW is a brief, easy-to understand, questionnaire to assess problem-solving styles. It has been used with individuals from ages 12 to 84, across a wide variety of occupations and settings. It is based on extensive theory and research on creativity, innovation, and the psychology of the person.

Selby, E. C., Treffinger, D. J., Isaksen, S. G., & Lauer, K. J. (2002). *VIEW: An assessment of problem solving style: Technical and user's guide*. Sarasota, FL: Center for Creative Learning.

This technical guide includes detailed information on the validity and reliability of VIEW, as well as information on the theoretical and conceptual underpinnings of the instrument.

Selby, E. C., Treffinger, D. J., & Isaksen, S. G. (2007). *Facilitator guide – VIEW: An assessment of problem solving style* (2nd ed.) Sarasota, F. Center for Creative learning, Inc.

This guide presents practical information regarding the effective administration, scoring, interpretation, and applications of VIEW. It is designed as a reference tool and guidebook for those facilitating the use of VIEW.

Selby, E. C., Treffinger, D. J., & Isaksen, S. G. (2007). *Technical manual – VIEW: An assessment of problem solving style* (3rd ed.) Sarasota, F. Center for Creative learning, Inc.

This manual provides technical information and updates to the 2004 technical manual regarding VIEW. The manual focuses exclusively on the theoretical and empirical information that will be of interest to serious scientific or scholarly users who are concerned with the foundations and the research underpinnings of the instrument.

Selby, E. C., Treffinger, D. J., Isaksen, S. G., & Lauer, K. J. (2004). *VIEW: An assessment of problem solving style – Technical manual* (2nd ed.). Sarasota, FL: Center for Creative Learning.

This manual provides technical information regarding VIEW. The manual focuses exclusively on the theoretical and empirical information that will be of interest to serious scientific or scholarly users who are concerned with the foundations and the research underpinnings of the instrument.

Selby, E. C., Treffinger, D. J., Isaksen, S. G., & Lauer, K. J. (2004). *VIEW: Facilitator's guide.* Sarasota, FL: Center for Creative Learning.

This guide presents practical information regarding the effective administration, scoring, interpretation, and applications of VIEW. It serves as a reference tool and guidebook for those facilitating the use of VIEW.

Treffinger, D. J. (2003). *VIEW 2003 Technical Report and Update*. Sarasota, FL: Center for Creative Learning.

The purpose of the technical report and update is to reexamine the descriptive data and the data providing psychometric support for the validity and reliability of VIEW. This update includes data collected as of December, 2003.

Treffinger, D. J. (2004). *VIEW 2004 Technical Report and Update*. Sarasota, FL: Center for Creative Learning.

This technical update presents the supporting statistical information regarding the instrument, based on the master VIEW database as of Summer, 2004. The data continue to support the soundness of VIEW as a valid, reliable, and practical tool for assessing problem-solving style.

Treffinger, D. J. (2005). *VIEW 2005 Technical Report and Update.* Sarasota, FL: Center for Creative Learning.

This update reports the results of additional data collection and analyses through December, 2005. The data continue to support the soundness of VIEW as a valid, reliable, and practical tool for assessing problem-solving style.

Treffinger, D. J. (2006). *VIEW 2006 Technical Report and Update.* Sarasota, FL: Center for Creative Learning.

This update reports the results of additional data collection and analyses through December, 2006. The data continue to support the soundness of VIEW as a valid, reliable, and practical tool for assessing problem-solving style.

Treffinger, D. J. (2007). *VIEW 2007 Technical Report and Update.* Sarasota, FL: Center for Creative Learning.

This update reports the results of the additional data collection and analyses through December, 2007. The data continue to support the soundness of VIEW as a valid, reliable, and practical tool for assessing problem-solving style.

Treffinger, D. J. (2008). *VIEW 2008 Technical Report and Update.* Sarasota, FL: Center for Creative Learning.

This update reports the results of additional data collection and analyses for the VIEW Inventory through December, 2008. The data continue to support the VIEW as a valid, reliable, and practical tool for assessing problem-solving style.

Treffinger, D. J. (2009). *VIEW 2009 Technical Report and Update*. Sarasota, FL: Center for Creative Learning.

This update reports the results of additional data collection and analyses for the VIEW Inventory through December 31, 2009. The data continue to support the VIEW as a valid and reliable tool for assessing problem-solving style.

Treffinger, D. J. (2010). *VIEW 2010 Technical Report and Update.* Sarasota, FL: Center for Creative Learning.

This update reports the results of additional data collection and analyses for the VIEW Inventory through December 31, 2010. The data continue to support the VIEW as a valid and reliable tool for assessing problem-solving style.

Treffinger, D. J., Schoonover, P. F., & Selby, E. C. (2012). *Educating for creativity and innovation.* Waco, TX: Prufrock Press.

This textbook includes a chapter on creativity characteristics and styles, with case studies of several students, and discussions in subsequent chapters of using student data for effective assessment and differentiated planning for instruction in creative and critical thinking and problem solving, across ages and curriculum areas.

Treffinger, D. J., Selby, E. C., Isaksen, S. G. & Crumel, J. H. (2007). *An introduction to problem solving-style.* Sarasota, FL. Center for Creative learning, Inc.

This book provides a concise, practical overview of problem-solving style. It outlines the nature of problem-solving style and describes three problem-solving style dimensions and six styles. It explains the important and unique personal characteristics and implications, benefits, and risks of each style. In addition, the book discusses: the implications of style for effective problem solving; the importance of style for group composition, teamwork, and enhancing work relationships; and, the unique ways the three style dimensions interact with each other.

Published Articles and Chapters

Aerts, W. (2012). Creativity and innovation: The case of two major communications firms and an aerospace engineering organization. *Leading Edge Forum – Computer Sciences Corporation Papers*.

People, organizations and societies benefit when there is an appropriate fit between individuals and their environments, especially when it comes to innovation. This article elaborates on the findings of two case studies in the telecommunications industry dealing with different style preferences when innovating. It also describes the findings of a research project within a large professional aerospace organization and elaborates on the role of organizational climate and leadership influence on innovation. Integrating both cases, it examines the impact of people and their environment on innovation. The articles proposes that problem-solving styles make a difference for some dimensions of creative climate and should be taken into account when leading or managing people.

Arnett, A. (2004). The Kinesthetic VIEW. *Creative Learning Today, 13* (4), 6-7.

The author addresses the problem that often occurs when people have been working together so habitually that they unconsciously limit their ability to see and act outside the frame of reference they have created. This article illustrates an exercise that combines knowledge from VIEW with physical and emotional states that can potentially help people become more creative and thinking outside their habitual process.

Babij, B. (2008). Vitality or cancer in the C-Suite. In G. J. Puccio, C. Burnett, J. F. Cabra, J. M. Fox, S. Keller-Mathers, M. C. Murdock, & J. A. Yudess (Eds.), *An international conference on creativity and innovation management: Integrating Inquiry and action – Conference Proceedings Book I* (pp. 44-57). Buffalo, NY: International Center for Studies in Creativity.

Chief Executive Officers (CEOs) and their seconds in command arguably the most visible people in any organization. The nature of the relationship between these two can have enormous impact on the health and success of a company. The purpose of this case study is to explore some of the functional and dynamic elements of this relationship using two assessments: VIEW and Situational Outlook Questionnaire (SOQ), a measure of creative climate. Their results suggested that these two measures could be used to design interventions that would sustain, repair, or strengthen this key relationship.

Bergsgaard, M., & McCluskey, K. (2007). The Canada-Russia talent development project in a nutshell: From an acorn to an oak. *Creative Learning Today, 15* (1), 2-5.

The authors describe a collaboration with Russian educators to help develop the talents of at-risk students in their country. The report illustrates a three-phase project addressing talent development program and its evaluation.

Burger, C., Marino, C., Ponterotto, J., & Houtz, J. (2008). Problem solving style and multicultural personality dispositions. *Creative Learning Today, 16* (1), 2-3.

Fifty-one graduate psychology students responded to *VIEW* and the *Multicultural Personality Questionnaire (MPQ).* Partial correlations were significant between measures, most strongly in the Orientation to Change dimension. No significant correlations were found between Ways of Deciding and MPQ. Results of this study provide additional evidence of the construct validity of VIEW and the importance of further efforts to understand different styles of behavior.

Chiu, M. H. (2006). VIEW assessment of problem solving style: A summary report on the Chinese edition. *Creative Learning Today, 14* (3), 3+.

The author reports on the development of the Chinese translation of VIEW. The author found Chinese subjects more likely to have a Developer preference than has been reported for subjects responding to VIEW in other languages and cultural settings. Further research may help clarify cross-cultural perspectives on the Orientation to Change construct and its assessment.

Clapp, R. G., Kirton, M. J., 1994, The relationship between cognitive style and psychological climate: Some comments on the article by Isaksen & Kaufmann. *Studia Psychologica, 36,* 129-134.

This article offers a critique of an earlier study conducted by Isaksen and Kaufmann. The authors raised questions about the SOQ as a climate measure as they believed it to be an assessment of both level and style. Isaksen and Lauer (see reference and annotation in this document) also responded to this critique.

Costello, T. & Houtz, J. (2004) More on the factor structure of VIEW. *Creative Learning Today, 13* (4), 5.

This analysis supported the proposed factor structure of VIEW, but recommended that more research looking into its components and their inter-relationships is always beneficial to adding validity to the tool.

Crerar, A., Maghan, M., Matos-Elefonte, H., & Houtz, J. C. (2012). Problem-solving style and achievement: Data from three studies. *Creative Learning Today, 18 (4),* 2-3.

This study examined the relationships between VIEW and measures of achievement including student grades and standardized test scores. Developers, Internals, and Task-Oriented deciders achieved higher scores on standardized tests and class grades. The authors discuss the implications and limitations of the research.

Doheny, D., Houtz, J. C., & Selby, E. C. (2007/2008). Teaching styles and problem solving style. *Creative Learning Today, 15* (4), 10-11.

This study examined the relationships between VIEW, the Classroom Activities Questionnaire, and researcher-constructed questions in a sample of 38 female teachers who taught elementary, secondary, or special education classes. Significant relationships were consistent with VIEW theory. What may be characterized as more "constructivist, student-oriented" classrooms appear associated with more Person-oriented or External problem-solving-styled teachers.

Delcourt, M. A.., Woodel-Johnson, B. L., Burke, K. & Treffinger, D. J. (2015). Learning styles and problem solving styles of talented secondary school students. *International Journal for Talent Development and Creativity, 3(2),* 183-196.

This study was conducted to investigate learning styles and problem-solving styles among secondary school students (n = 105; mean age, 16.22). Teachers and coaches identified students talented in either, athletics, science, or the visual arts. Addressing styles can serve as a key component of instructional differentiation, so it is important to understand whether style differences exist within and among groups of students. Therefore, the purposes of this research were to examine students' styles in designated talent areas and the relationships between the dimensions of style indicators in order to make recommendations for selecting tools and designing instructional programs. Results supported the principle that the two selected instruments, VIEW: An Assessment of Problem-solving Styles and Building Excellence) yielded both common and unique insights into student characteristics, tested at the $p < .007$. Implications relate to the role of learning styles and problem-solving styles in individual differences and provide guidance for instructional differentiation.

Esposito, B. & Roehm, S. (2004). Innovative leadership in today's demanding marketplace: Applications of VIEW in the world of business. *Creative Learning Today, 13* (1), 7-9.

The authors propose that understanding the problem-solving style of individuals within organizations can have strong positive impact on how they find and implement strategic innovation initiatives. The authors share several examples of how individuals and executive teams have used VIEW to better manage their human resources in pursuing strategic innovation.

Esposito, B., Roehm, S., Treffinger, D. J., Selby, E. C., Isaksen, S. G., & Lauer, K. J. (2004). Innovative leadership in today's demanding marketplace: A new tool for understanding our problem solving style to better leverage human assets. *AB Insight* (from the IBM Advanced Business Institute), March Issue, 1-8.

The authors discuss the strong positive impact that understanding the problem-solving style of individuals within organizations can have on efforts to develop and implement strategic innovation initiatives.

Gartner, T. Hanakis, M., Landers, A., Mandelbaum, M., Matos-Elefonte, H., & Vazquez, S. (2013). Where are the Explorers? *Creative Learning Today, 19* (4), 2-3.

Five different samples of high school through adult-age participants demonstrate dominance of several problem-solving styles as opposed to others. This "imbalance" questions how well success in the typical, traditional academic enterprise prepares individuals with all style preferences for problems in the future.

Houtz, J. C. (2002). Creativity style makes a difference in problem solving. *Creative Learning Today, 11* (2), 7-9.

Creativity styles are a relatively new topic in creativity research. Rather than investigating *how much* creativity individuals can demonstrate, researchers have begun studying *how* people exhibit creativity. This article highlights some key issues regarding this distinction between level and style.

Houtz, J. C., Matos, H., Park, M. S., Scheinholtz, J., & Selby, E. (2007). Problem solving style and motivational attributions. *Psychological Reports, 101,* 823-830.

Fifty-two Master's-level female graduate students completed VIEW and provided attributions for their success and failures according to several categories of reasons. Attributions were in the form of percentages to the categories of skill or ability, effort devoted to the task, task difficulty, chance or other factors, after Weiner's theory of motivation. Women scoring more Developer than Explorer on VIEW attributed a greater percentage of their failures to uncontrollable factors, theorized to be because individuals with a developer style are more organized, deliberate, and planful in their work efforts.

Houtz, J. C., Ponterotto, J. G., Burger, C., & Marino, C. (2010). Problem solving style and multicultural personality dispositions: A study of construct validity. *Psychological Reports, 106,* 927-938.

This exploratory study examined the relationship between problem-solving styles and multicultural personality dispositions among 91 graduate students in the U.S. Cultural Empathy, Open-mindedness, Social Initiative, and Flexibility correlated significantly with Explorer and External problem-solving styles, as predicted.

Houtz, J. C., & Selby, E. C. (2009). Problem solving style, creativity, and problem solving confidence. *Educational Research Quarterly, 33* (1). 28-30.

Forty-two undergraduate and graduate students completed VIEW, the non-verbal Torrance Test Thinking Creatively with Pictures, and the Problem-Solving Inventory (PSI). Consistent with VIEW theory, there was no relationship between actual creative thinking production and problem solving style. View scores on orientation to change and ways of deciding were correlated significantly with the Torrance measure of resistance to closure. Explorers and person-oriented deciders were more resistant to closure.

Houtz, J. C., & Selby, E. C. (2014). Using style in teaching assignments. *Creative Learning Today, 20,* 2-3.

The purpose of this short, practical article was to share the results of applying VIEW with students and examining their choices of student learning activities. The findings indicate relationships between students' styles and their choices of learning approaches.

Isaksen, S. G. (2004). The level-style of creativity distinction: Comments on a recent comparison of two measures of creativity style. *Perceptual and Motor Skills, 99,* 223-224.

The purpose of this commentary is to point out general concern relating to keeping these constructs distinct and then using clear measures to help increase our understanding and appreciation of diverse styles of creativity and how they contribute to improving creative abilities.

Isaksen, S. G. (2004). The progress and potential of the creativity level – style distinction: Implications for research and practice. In W. Haukedal, & B. Kuvas (Eds.). *Creativity and problem solving in the context of business management* (pp. 40–71). Bergen, Norway: Fagbokforlaget.

This chapter summarizes the literature surrounding the creativity level-style distinction and identifies some of the productive implications of such a differentiation for creativity research and practice. It summarizes the background for cognitive styles and the uses of this relatively new approach by creativity researchers.

Isaksen, S. G. (2005). Progress on VIEW: An Assessment of problem solving style. *Communiqué, 14,* 26.

A short update on VIEW, highlighting the growth in qualified users of VIEW, as well as uses of the instrument to assess problem-solving style.

Isaksen, S. G. (2009). Exploring the relationship between problem-solving style and creative psychological climate. In P. Meusburger, J. Funke, & E. Wunder (Eds.). *Milieus of creativity: An interdisciplinary approach to spatiality of creativity* (pp. 169-188). Dordrecht: Springer Science.

This chapter approaches the issue of person-environment fit through an operational framework of creativity and innovation. The chapter looks specifically at the interaction of problem-solving style and creative psychological climate.

Isaksen, S. G. (2013). Teamwork for transformation: Applying VIEW for high performance. The Creativity Research Unit, 13, 1-13.

This article outlines approaches and phases of group development and provides insights into how various problem styles can contribute to each phase. The emphasis is on linking style to the variety of group dynamics.

Isaksen, S. G., & Aerts, W. (2011). Linking problem-solving style and creative organizational climate: An exploratory interactionist study. *International Journal of Creativity and Problem Solving, 21* (2), 7-38.

This study examined relationships of the constructs of problem-solving style and climates for creativity. Researchers assessed the best and worst-case climates by administering two short forms of the Situational Outlook Questionnaire in which 213 individuals identified specific best and worst-case experiences. They used VIEW to measure problem-solving style. Results confirmed that significant differences between best and worst workplace climates existed, and suggested that problem-solving styles make a difference for some of creative climate dimensions.

Isaksen, S., DeSchryver, L., & Onkelinx, J. (2010). A cross-cultural examination of creative problem solving style: The Dutch translation of VIEW. *The Journal of Creative Behavior, 44* (1), 19-28.

This study examined the cross-cultural applicability of creative problem solving styles by translating VIEW from its native English into Dutch and examining its psychometric properties and preliminary validation evidence. In general, the Dutch translation performed similarly to its original.

Isaksen, S. G. & Dorval, K. B. (1993). Toward an improved understanding of creativity within people: The level-style distinction. In S. G. Isaksen, M. C. Murdock, R. L. Firestien, & D. J. Treffinger (Eds.), *Understanding and recognizing creativity: The emergence of a discipline* (pp. 299-330). Norwood, NJ: Ablex.

In this chapter, the authors discuss the value of making a distinction between creative ability and creative style, and further discuss implications for research and practice in the field of creativity. This chapter also provides an overview of the Cognitive Styles Project, in which a number of studies of various learning style, cognitive style, and creativity style measures laid the foundation for the development of the VIEW instrument.

Isaksen, S. G., Dorval, K. B., & Kaufmann, G. (1992). Mode of symbolic representation and cognitive style. *Imagination, Cognition and Personality, 11,* 271-277.

This study examined the relationship between creativity and imagery using a prediction from the theories of symbolic representation developed by Morris and Hampson and Kaufmann. Results showed a significant relationship between innovative problem-solving preference and general level of use of conscious modes of symbolic representation. Subjects with an innovative preference also demonstrated a stronger preference for imaginal modes of representation.

Isaksen, S. G., & Geuens, D. (2007). Exploring the relationships between an assessment of problem solving style and creative problem solving. *The Korean Journal of Thinking and Problem Solving, 17* (1), 5-27.

This study examined the relationships between VIEW and the preference for learning and using of the specific tools, guidelines, stages, and components of the current version of creative problem solving. There were significant relationships between all three dimensions of VIEW and various creative problem solving tools, guidelines, and process stages.

Isaksen, S. G., Kaufmann, A. H., & Bakken, B. T. (2016). An Examination of the Personality Constructs Underlying Dimensions of Creative Problem-Solving Style. *Journal of Creative Behavior, 50,* 264-281.

This study investigated the personality facets that undergird the construct of problem solving style, particularly when approaching more creative kinds of problem solving. Researchers administered the fifth edition of Cattell's 16PF and VIEW: An Assessment of Problem-Solving Style to 167 students from the Norwegian Business School. Data analysis included correlation, ANOVA, multiple regression, and factor analysis. Personality profiles derived for each of VIEW's three dimensions were in generally expected directions. Relationships between problem-solving style and personality were supportive of VIEW's construct validity. The overall results supported the position that style operates as a bridge between personality and cognitive function – particularly when solving creative kinds of problems.

Isaksen, S. G., & Lauer, K. J. (1999). Relationship between cognitive style and individual psychological climate: Reflections on a previous study. *Studia Psychologica, 41,* 177-191.

This exploratory study examined the relationship between cognitive style and individual perceptions of creative climate. This article reflects on previous research on cognitive style and climate.

Isaksen, S. G. & Kaufmann, G. (1990). Adaptors and innovators: A discriminant analysis of the perceptions of the psychological climate for creativity. *Studia Psychologica: The Journal for Basic Research in Psychological Sciences, 32*, 129-141.

This paper reports preliminary findings of research on the relationship of two distinct, yet complementary assessment approaches: creative style and creative climate. The study asked whether adaptors and innovators held different perceptions of the creative climate.

Isaksen, S. G., Puccio, G. J. & Treffinger, D. J. (1993). An ecological approach to creativity research: Profiling for creative problem solving. *Journal of Creative Behavior, 23* (3), 149-170.

This article describes "The Profiling Project," a research program based on an ecological or interactionist approach to creativity. The research program focused specifically on is the continued development and application of Creative Problem Solving. The article outlines several implications of the research for theory and practice.

Johnson, A., Jackson, M. A., Selby, E. C., & Houtz, J. C. (2014). Predicting career interests from problem-solving style with high school students. *International Journal for Talent Development and Creativity, 2,* 43-56.

The goal of this study was to examine the relationship between problem-solving style as measured by VIEW: An Assessment of Problem-solving Style and career interests or preferences in high school students as measured by the Kuder Career Search with Person Match. Three-hundred forty-two eighth through eleventh grade junior and senior high school students from a suburban high school participated in this study. VIEW yields information about six individual problem-solving styles along three dimensions: Orientation to Change (Explorer vs. Developer), Manner of Processing (External vs. Internal), and Ways of Deciding (People-Oriented vs. Task-oriented). The Kuder Career Search with Person Match provides scores according to 16 career interest categories as well as Holland's RIASEC (Realistic, Investigative, Artistic, Social, Enterprising, and Conventional) model of categories of personality/career types. With respect to the Orientation to Change dimension, Explorers displayed a preference for the Kuder Arts/Communication (Artistic) Career Cluster. Externals displayed a preference for the Kuder Sales/Management (Enterprising) Career Cluster. With respect to the Ways of Deciding Dimension, those who had a People-Oriented decision-making style had a greater preference for the Kuder Arts/Communication (Artistic) Cluster and the Kuder Social/Personal Services (Social) Cluster while those who had a Task-Oriented decision-making style had a greater preference for the Kuder Outdoor/Mechanical (Realistic) Cluster and the Kuder Science/Technology (Investigative) Career.

Kaufmann, G., Isaksen, S. G. & Lauer, K. J. (1996). Testing the glass ceiling effect on gender differences in upper level management: The case of innovator orientation. *European Journal of Work and Organizational Psychology, 5,* 29-41.

The issue of the "glass ceiling" effect on gender differences in upper level management was addressed. Results show a significant interaction between gender and managerial level on innovation-oriented problem solving, where females at the executive level exhibit a strikingly higher innovator score than their male colleagues.

Lofquist, E. A., & Isaksen, S. G. (2019). Cleared for takeoff? A snap shot of the context for change in a high-risk industry. *Journal of Applied Behavioral Science, 55,* 277-305.

Civil aviation is a high-risk industry where actors are experiencing increasing focus on economic performance, greater international competition, and growing safety threats that require continual organizational adjustments. In this paper, we present the findings of a case study conducted within the Norwegian national air traffic management organization – Avinor, in preparation for a major reorganization initiative. In this study, we mapped the aggregated readiness and positioning for organizational change in the three main Air Traffic Control Centers (ATCC) in Norway using a mixed-method approach to help organizational leaders better understand each unit's positioning for change, and more specifically, individual preferences for change styles. The results suggest that participants at the different ATCCs had developed distinctly different change preferences at both the group and individual levels, and that each was distinctly different from the other units in their positioning and readiness for change.

Lua, F. (2006). VIEW – The Singapore experience. *Creative Learning Today, 14* (4), 8-9.

The author introduced VIEW to Singapore in mid-2005 with the intent of specific applications in the areas of Creative Problem Solving and Innovation, and organizational development, with a focus on team building, communication, and conflict management. The author administered VIEW to teachers involved in a creative problem solving program for students. This article presents and discusses the results of that assessment.

Maghan, M. (2017). Problem Solving Style and Coping Strategies: Effects of Perceived Stress. *Creative Education, 8,* 2332-2351. https://doi.org/10.4236/ce.2017.814160

One hundred and seven community college students completed VIEW: An Assessment of Problem Solving Style and the COPE Inventory. They then were randomly assigned to one of three groups. Group 1 received a vignette of a more serious personal problem. A second group was given a vignette depicting a less stressful problem situation. The third group was given a simple passage about a geography topic. On VIEW, Developer- and Internal problem-solving-styled participants across all conditions reported higher stress ratings, suggesting greater sensitivity to stressful situations. Additionally, there were significant correlations between the VIEW and COPE scores, suggesting that Explorer-, External-, and a Task-oriented problem-solving-styled individuals were more likely to use Restraint as a coping strategy, all of which suggest that in the context of a personal problem, individuals may be more likely to recognize that any solution will take time to solve, perhaps requiring "new thinking" (Explorer style), help from others (External style), and "hard" choices to be made (a Task-oriented decision-making style).

Maghan, M. & Houtz, J. (2009). Problem solving style and career interests: Can VIEW help? *Creative Learning Today, 17 (1),* 5-6.

Career development has long been an important part of the counseling field. This article proposes that VIEW could perhaps be used as a complement to other regularly used career interest assessments.

Main, L. F., Delcourt, M. A., & Treffinger, D. J. (2017). Effect of group training in problem-solving style on Future Problem Solving performance. *Journal of Creative Behavior*, *53,* 274-285.

Seventy-five participants from one suburban high school formed 21 teams with 3–4 members each for the Future Problem Solving Program International (FPSPI). Students were selected to participate in either the regular FPSPI or an enhanced FPSPI, where multiple group training activities grounded in problem-solving style were incorporated into a 9-week treatment period. An ANCOVA procedure was used to examine the difference in team responses to a creative problem-solving scenario for members of each group, after accounting for initial differences in creative problem-solving performance, years of experience in FPSPI, and creative thinking related to fluency, flexibility, and originality. The ANCOVA resulted in a significant difference in problem-solving performance in favor of students in the treatment group ($F(1, 57) = 8.21$, $p = .006$, partial eta squared = .126, medium), while there were no significant differences in years of experience or creativity scores. This result led researchers to conclude that students in both groups had equivalent creative ability and that participation in the group activities emphasizing problem-solving style significantly contributed to creative performance.

McCoy, F. H., Selby, E. C., & Houtz, J. C. (2014). Problem solving style and creative productivity. *International Journal for Talent Development and Creativity, 2,* 117-126.

Freshmen education students created five-to ten-minute multimedia presentations in response to one of several prompts about education, learning, and teaching. Students who completed VIEW: An Assessment of Problem Solving Style were assigned to working teams based on their VIEW scores such that team members were similar on the three dimensions of problem solving style (Orientation to Change, Manner of Processing, and Ways of Deciding). Students' presentations were scored for clarity of prompts used, for supporting details, and for use of multi-media to enhance the presentations. Generally, on Orientation to Change, Developer-dominated teams received higher ratings on clarity of prompt expressed in their presentations. In addition, "style-matched" teams received higher ratings than randomly-created teams but this result had low statistical power, so results must be considered suggestive only. Additional research on problem-solving style and creative productivity is essential.

Neyen, J., Volpe, C., Selby, E. C., & Houtz, J. C. (2017). The relationships of problem solving style to parenting styles: Two studies. *Educational Research Quarterly, 2,* 43-56.

Two independent studies were conducted to examine the relationship of problem solving styles to parenting styles. Data were analyzed using stepwise hierarchical multiple linear regression. After controlling for age and gender, individuals who recalled and rated their mothers' parenting style as more permissive were also those adults who rated their problem-solving style as more exploratory. Other findings were suggestive of additional theoretical relationships among problem solving and parenting styles.

O'Shea, D. & Buckley, F. (2007). Towards an integrative model of creativity and innovation in organisations: A psychological perspective. *The Irish Journal of Psychology, 28* (3-4), 101-128.

This article addresses the value that research into creativity, primarily investigated by psychologists, has to the field of innovation, more commonly researched in business, science, and technology arenas. It discusses multiple factors that influence innovation, including how problem-solving style contributes to innovation in organizations.

Schoonover, P. F., & Treffinger, D. J. (2003). Implications of style differences for explorers and developers in the use of CPS tools. *Creative Learning Today, 12* (3), 2-3.

The authors discuss the influence of problem-solving preferences on how many people learn and apply creative problem solving tools. The article discusses the ways style influences people's efforts to customize their learning and application and strive to "make tools their own."

Schroth, S. T., Helfer, J. A., Crawford, M. A., Dixon, J. D. Hoyt, H. M. (2015). Establishing groups in college and university classroom: Using VIEW to form better cooperative groups and improve learning outcomes. *Educational Research Quarterly, 39,* 3-35.

Six classes at a selective liberal arts college in the Midwest, two each in chemistry, educational studies, and Spanish, used cooperative groups as part of the students' learning experiences. One class from each discipline used VIEW to formulate these cooperative groups, while those that constituted the control groups used more traditional ways of creating groups. A t the end of each class, all students were given a survey asking them to evaluate various aspects of their experiences with group activities. Those students whose groups had been formed using data from VIEW reported statistically significant differences in their satisfaction with their group experiences, especially with regard to attention the group gave to new ideas, preferences for the level of structured authority, how information was handled by the group, and the balance between task concerns and personal or interpersonal needs when making decisions.

Selby, E. (1997). Lucy and Michael: Case studies of creative styles in teenagers. *Creative Learning Today, 7* (2), 4-6.

Case studies of two middle-school students in a playwriting group whose opposite styles created challenges for the group, but who, with the guidance of a knowledgeable teacher, ultimately managed their differences for the benefit of the group's productivity.

Selby, E. (2002). VIEW: A brief history. *Creative Learning Today, 11* (3), 2-3.

In this brief report, the author shares the history that led to the development and publication of VIEW, an assessment of problem-solving style.

Selby, E. (2004). The "What is Your Style?" exercise: Using VIEW to explore individual problem solving style. *Creative Learning Today, 13* (2/3), 6-8.

The "What is Your Style?" exercise provides individuals an opportunity to explore their preferences after hearing a presentation of each of VIEW's three dimensions, and before they see their own scores. The author explains the process and some key insights learned from utilizing this exercise in his classes.

Selby, E. C. (2013). A closer look at orientation to change: Three elements. *Creative Learning Today, 19* (4), 4-7.

This study investigated the extent to which, as subjects' overall preference for either the Explorer or Developer style became more well defined, their scores on each of the three OC elements (Novelty, Structure and Authority, and Search Strategy) would tend to move to either end of the OC dimension while those with moderate OC preferences might score on the other side of the mean. Thus, those with a moderate OC preference for Developer might prefer an Explorer's approach to one of the three elements. The researcher tested this using data from 867 respondents. The results confirmed expected patterns. The report discusses implications of the three elements for understanding individual results and giving appropriate feedback.

Selby, E. & Houtz, J. (2009). An exercise with style. *Creative Learning Today, 17* (1), 6-7.

At a workshop for a group of teachers, administrators, and Board of Education members, the authors implemented a new situational exercise to facilitate discussion about problem-solving style. The results of this exercise were an increased engagement in discussion on problem-solving styles, which indicates that this exercise could be used during facilitation and workshops to increase levels of engagement.

Selby, E., Matos, H., Park, P., Scheinholtz, J. & Houtz, J. (2007). Problem solving style and attributions for success and failure. *Creative Learning Today, 15* (1), 8-9.

This study examined the relationship between motivational attributions and individual problem solving styles. Results suggest that Developers, who are generally more cautious or rule-oriented, plan their problem-solving approach more carefully and may be somewhat surprised by their failures. As a result, they are more likely to attribute failure to unexpected, uncontrollable factors. There were no observed differences in terms of attributions for success. Implications are briefly discussed as well as directions for future research.

Selby, E., Shaw, E., & Houtz, J. (2003). Construct validity of VIEW: An assessment of problem solving style. *Creative Learning Today, 12* (3), 4-7.

The purpose of this study was to add to the body of evidence supporting the construct validity of VIEW. Instruments use to conduct this study included VIEW, the Myers-Briggs Type Indicator, The Big Five personality characteristics, and learning styles based on work by Torrance & Mourad. A large number of significant correlations were observed, all suggesting construct validity for VIEW.

Selby, E., Shaw, E., & Houtz, J. (2005). The creative personality. *Gifted Child Quarterly, 49* (4), 300-314.

The purposes of this article are to review the accumulated body of creative personality research, describe the works of a few major researchers and their methods, briefly review how personality is related to creative processes, and examine the relatively new construct of creative and problem-solving style.

Selby, E. C., & Treffinger, D. J. (2004). Giftedness, creativity, and learning style. In R. Dunn & S. A. Griggs, (Eds). *Synthesis of the Dunn and Dunn learning-style model research: Who, what, when, where, and so what?* (pp. 61-66). New York: St. John's University's Center for the Study of Learning and Teaching Styles.

In this chapter, the authors identify and summarize briefly some contemporary views of giftedness. Second they consider a contemporary understanding of creativity by discussing learning style. Last, the authors identify several significant connections among giftedness, creativity, and learning style.

Selby, E. C., Treffinger, D. J., & Dunn, R. (1995). The importance of learning style for empowering at-risk students. In K. McCluskey, P. Baker, S. O'Hagan, & D. J. Treffinger, (Eds.). *Lost prizes: Talent development and creative problem solving for at risk students.* (pp. 213-224). Sarasota, FL: Center for Creative Learning.

The authors shed light on how at-risk students may possibly be empowered by gaining knowledge on their unique learning styles, as well as how to apply them in ways that encourage personal growth.

Selby, E. C., Treffinger, D. J., Isaksen, S. G., & Lauer, K. J. (2002). VIEW assessment of problem solving style now available. *Creative Learning Today, 11* (1), 1-8.

The authors introduce a new tool, VIEW, that assesses problem-solving style. VIEW was designed to assist and support people in using their preference to solve problems and manage change effectively.

Selby, E. C., Treffinger, D. J., Isaksen, S. G., & Lauer, K. J. (2004). Defining and assessing problem-solving style: Design and development of a new tool. *The Journal of Creative Behavior, 38,* 221-243.

The purposes of this article are to examine the emerging construct of problem-solving style, to present a new instrument for assessing problem-solving style (VIEW), and to identify its role in applications of Creative Problem Solving.

Selby, E., Treffinger, D., Isaksen, S., & Powers, S. (1993). Use of the Kirton Adaption-Innovation Inventory with middle school students. *The Journal of Creative Behavior, 27* (4), 223-235.

Eighty-six eighth-grade students, their parents, and their teachers rated innovative or adaptive behavior, using the Kirton Adaption-Innovation Inventory. Scores on the inventory were reliable, stable, and valid. There were no significant differences between male and female students' scores, and correlations with scores on the Comprehensive Test of Basic Skills were low but significant. This research laid the foundation for Selby, Treffinger, and Isaksen's collaboration that led to the development of VIEW.

Shaw, E. J., Selby, E. C., & Houtz, J. C. (2009). Problem solving style and beliefs about teaching, learning, and problem solving. *Creativity Research Journal, 21* (4), 394-399.

Seventy-four pre-service teachers in an urban graduate school of education responded to *VIEW* and a questionnaire in which they were asked to rate the importance of numerous principles of learning, teaching, and problem solving. Judges had previously classified these principles according to the six different *VIEW* problem solving styles (Explorer, Developer, External, Internal, Person-oriented, Task-oriented). Participants categorized by a particular style rated more highly those principles that matched their style. The authors discuss implications for instruction and the development of problem solving skills.

Sokolowska, J. (2006). Cognitive aspects of behavioral tendencies in dimensions of temperament and problem solving style. *Creative Learning Today, 14* (4), 15-16.

The purpose of this study was to explore possible associations of behavioral tendencies as defined by temperamental and cognitive preferences reflected in problem solving style to further enhance understanding of the cognitive processes within the framework of individual differences.

Stead, S. J. (2008). A new VIEW of customers: A case study in using a problem-solving style assessment as a customer profiling tool. In G. J. Puccio, C. Burnett, J. F. Cabra, J. M. Fox, S. Keller-Mathers, M. C. Murdock, & J. A. Yudess (Eds.), *An international conference on creativity and innovation management: Integrating inquiry and action – Conference proceedings book II* (pp. 176-187). Buffalo, NY: International Center for Studies in Creativity.

This case study demonstrates that there is a rich opportunity for innovation in the use of cognitive style assessments to understand customer preferences and what drives their behaviors. This was the first use of VIEW for such purposes. The business that used VIEW as a customer profiling tool experienced measureable positive impact.

Treffinger, D. J. (1986). Gifted education and learning styles: new connections. *Learning Styles Newsletter, 7* (1), 4+.

The author discusses the implications of assessing learning styles in gifted education. The article highlights the benefits of knowing the learning styles of students.

Treffinger, D. J. (1988). Learning styles and thinking skills: exploring the connections. *Creative Learning Today, 2* (1), 4-5.

Knowledge and application of learning styles can be beneficial to in efforts to teach thinking skills and problem solving by helping educators or trainers to assess creative strengths, individualize learning of thinking skills and tools, and enhance group process.

Treffinger, D. J. (2000). Uniquely me: Personal style and creativity. *Creative Learning Today, 9* (4), 1-2.

A brief editorial essay on the importance and value of style for individuals and groups in the process of recognizing and nurturing creative productivity.

Treffinger, D. J. (2003). Different paths for engaging and persuading explorers and developers. *Creative Learning Today, 12* (2), 9,12.

Practical behaviors and actions are given to help educators, teachers, and trainers persuade and engage both explorers and developers. Orientation to Change significantly affects the way individuals with different preferences are persuaded to action. It is important to consider your audience's problem-solving style when delivering a persuasive message.

Treffinger, D. J. (2004). Learning styles, creative learning, and talent development. *Creative Learning Today, 13* (2), 9-11.

Every parent knows that each child is different from every other. The same parenting and educational techniques that work for one rarely work the same way for others. This article summarizes the key benefits of taking learning styles into account in instruction, offers several cautions, and describes implications of research on learning styles for creative learning and talent development.

Treffinger, D. J. (2005). Differentiation for gifted learners. Online essay, Gifted Education Blog, http://www.prufrock.com/client/prufrockBlog/index.cfm, Posted August 17, 2005.

In gifted education, differentiation of instruction has long been a basic topic of concern. It is puzzling, however, to hear discussions of *"the* differentiated curriculum for the gifted," as though there a single "gifted curriculum" to serve all high-ability students in the same way. Differentiation should be a process of planning, design, and action that ensures appropriate, challenging, and developmental learning experiences for each learner.

Treffinger, D. J. (2006). Differentiated programming: The role of style. *Creative Learning Today, 14* (2), 3-5.

Differentiating instruction is an essential component of effective programming for giftedness and talent development. In this article, Treffinger looks more closely at the role of style as one of four factors that have an important role in differentiating effectively

Treffinger, D. J. (2006). Problem-solving style, teamwork, and problem-solving performance. *Creative Learning Today, 14* (4), 10-13.

The goal of this article is to examine the impact of team members' awareness of their personal problem-solving style preferences on their teamwork and problem-solving performance. In addition to knowing problem-solving methods and tools, successful teams must be able to collaborate effectively, share responsibilities, and build on the personal strengths of each team member as contributors to the group's efforts and accomplishments.

Treffinger, D. J. (2006). CPS master teaching tips: Use varied tools to level the playing field for differing style preferences. *Creative Learning Today, 14* (3), 10.

Facilitators of CPS can enhance their effectiveness by drawing on several tools from their repertoire, rather than just relying on a traditional application of the Brainstorming tool. The author describes how Brainwriting or Brainstorming with Post-It notes can help to engage people with internal style presences in problem-solving.

Treffinger, D., Crumel, J., & Selby, E. (2013). Utilizing problem-solving style and process tools to optimize leadership and team performance. *Tempo, 34* (2), 6-13.

Worldwide, organizations of every size are faced with complex and rapid change that threatens their survival. Based on research, theory, and field experience, this article describes how effective leaders can build an inclusive environment in which members of high-performing teams have opportunities to realize their full potential. Specifically, the authors argue that when team members understand their problem-solving style along the three dimensions assessed by VIEW and the interaction of style with the Creative Problem Solving components and stages, they will increase their effectiveness in meeting creatively the challenges posed by rapid change.

Treffinger, D. J., & Schoonover, P. F. (2012). Problem-solving style and distance learning: Research and practice. *Distance Learning: For Educators, Trainers, and Leaders, 9*(2), 1-9.

This article presents a model of student's problem-solving style preferences and describes the implications of each style for distance learning. Attention to style differences is important in both distance learning and in live classroom context.

Treffinger, D. J., & Schoonover, P. F. (2012). Problem-solving style as a tool for differentiation of instruction. *Creative Learning Today, 19,* 8-9

This article presents instructional implications for those learners with both exploratory and developmental styles as an illustration for taking problem-solving style into account when designing learning activities.

Treffinger, D. J., & Selby, E. C. (1993). Giftedness, creativity, and learning style: exploring the connections. In R. Milgram, R. Dunn & G. Price (Eds.) *Teaching and counseling gifted adolescents through their learning styles: an international perspective* (pp. 87-102). New York: Praeger.

The authors disuses the connections and relationships between giftedness, creativity, and problem-solving style as well as the implications of creativity and style for teaching and counseling.

Treffinger, D. J. & Selby, E. C. (1996). Style and creative productivity: Some key questions. *Creative Learning Today, 6* (2), 4.

A checklist of more than 20 questions, organized around four components of creative productivity (characteristics, operations, context, and outcomes) for understanding the role of style in creative productivity.

Treffinger, D., & Selby, E. (2004). Problem solving style: A new approach to understanding and using individual differences. *The Korean Journal of Thinking & Problem Solving, 14,* 5-10.

Instead of asking, "How creative is this person?," we have learned it may be better to ask "How is this person creative? What are his or her strengths?" This paper explores the dimension of problem solving style as a crucial dimension of creative productivity.

Treffinger, D., & Selby, E. (2008). Comprendiendo y desarrollando la creatividad: Una aproximacion practica. *Revista de Psicologia. 26*, 1, 8-21 (ISSN 0254-9247).

Se propone al pensamiento crítico y al pensamiento creativo como factores determinantes para afrontar el cambio constante al que está sometida la sociedad en la actualidad y, especialmente, los más pequeños. Asimismo, se discuten las herramientas para el desarrollo del pensamiento creativo y crítico y se propone un conjunto de herramientas básicas para la solución de problemas creativos, tanto a nivel de la generación de opciones como a nivel de la focalización de opciones. Se discute la importancia de las herramientas como base importante para el aprendizaje y para la gestión de cambios en la solución de problemas creativos, así como sus aplicaciones desde la infancia hasta la adultez. Finalmente, se establecen sugerencias para la enseñanza y la aplicación de instrumentos de pensamiento.

Treffinger, D. J., & Selby, E. C. (2009). Giftedness, creativity, and learning style. In: E. Polyzoi & C. Froese-Klassen (Eds.). *Reaching gifted and talented children: Global initiatives. Selected papers from the 17th biennial world conference.* (pages 49-55). Winnipeg, Manitoba: World Council for Gifted and Talented Children.

The authors explore and discuss the various connections between giftedness, creativity, and learning style. They describe relationships between these constructs and discuss implications for working with gifted students.

Treffinger, D. J., Selby, E. C., & Isaksen, S. G. (2008). Understanding individual problem-solving style: A key to learning and applying creative problem solving. *Learning and Individual Differences, 18,* 390-401.

More than five decades of research and development have focused on making the Creative Problem Solving process and tools accessible across a wide range of ages and contexts. Recent evidence indicates that when individuals, in both school and corporate settings, understand their own style of problem solving, they are able to learn and apply process tools more effectively, and when teams appreciate the styles of their individual members, their problem- solving efforts are enhanced. The article summarizes recent studies that support the conclusion that individual style differences provide an important key to understanding the interaction of person, process, product, and press when managing change.

Treffinger, D. J., Selby, E. C., & Schoonover, P. F. (2012, Autumn). Creativity in the person: Contemporary perspectives. *LEARNing Landscapes, 6* (1), 409-419.

All individuals, working alone or in collaboration with others, have creative characteristics, but activate and apply them in varied ways, at different times, and in response to differing tasks and conditions. A shift from asking, "How creative are you?" to the challenging question, "How are you creative?" challenges us to move beyond looking at *level* of creativity ("high, average, or low") and to consider *style* of creativity (varied ways of expressing and applying creativity). Understanding each student's unique creative strengths enables educators to differentiate learning and instruction effectively for creativity and innovation as well as for other important educational outcomes.

Treffinger, D., Young, G., Selby, E., & Shepardson C. (2002). *Assessing Creativity: A guide for educators.* Storrs, CT. The National Research Center on the Gifted and Talented. [Available online at:

http://www.creativelearning.com/images/stories/freePDFs/AssessCreatReport.pdf]

This monograph deals specifically with the challenge of recognizing or assessing creativity. It is intended for teachers, program coordinators, administrators, counselors, or researchers who are concerned with creativity measurement.

Woodel-Johnson, B. L., Delcourt, M., & Treffinger, D. J. (2012). Relationships between creative thinking and problem solving styles among secondary school students. *International Journal of Creativity and Problem Solving, 22,* 79-95.

The study's primary purpose was to explore the relationships between creative thinking abilities and problem-solving styles among high school students and to provide additional evidence relating to the ongoing inquiry and discussion regarding "level and style" in assessing creativity. There were no significant correlations between VIEW's three dimensions and scores on the Verbal or Figural forms of the Torrance Tests of Creative Thinking. Results support the hypothesis that level and style of creativity are independent.

Woodel-Johnson, B. L., Treffinger, D. J., Delcourt, M., & Burke, K. (Under Review). Learning styles and problem solving styles of talented secondary school students.

This study investigated learning styles and problem-solving styles among students (n = 105; mean age, 16.22) from three high schools. Significant relationships existed between the variables for the total sample, and both similarities and differences were noted among students talented in athletics, science, and visual arts. Visual Arts students were significantly more global than Athletes, and also had a greater Explorer OC preference than the other two groups. Science students were significantly more Internal than those in the other two groups, and preferred to work alone (although able to work with others). The Science students also had a significantly higher Task-oriented WD preference than the other two groups. Athletes preferred structure to a greater extent than the other groups. Although "style" is often applied to a broad range of variables, results supported the principle that various instruments yield both common and unique insights into student characteristics. Implications relate to the role of learning styles and problem-solving styles in individual differences and provide guidance for instructional differentiation.

Published Reviews

Schraw, G. (2007). [Review of VIEW: An Assessment of Problem Solving Style.] In K. F. Geisinger, R. A. Spies, J. F. Carlson, & B. S. Plake (Eds.). *The seventeenth mental measurements yearbook* (pp. 832-833). Lincoln, NE: Buros Institute of Mental Measurements. (Can be accessed online: Review #17073365, http://www.unl.edu/buros/jsp/search.jsp.)

The strengths of the VIEW include a) easy administration and scoring, and b) a well-written manual. Overall, the view provides a quick measure of problem-solving preferences. Understanding problem-solving preferences may be helpful to an individual or to an employer, but more information is needed about the accuracy of this classification scheme.

Staal, M. (2007). [Review of VIEW: An Assessment of Problem Solving Style.] In K. F. Geisinger, R. A. Spies, J. F. Carlson, & B. S. Plake (Eds.). *The seventeenth mental measurements yearbook* (pp. 833-836). Lincoln, NE: Buros Institute of Mental Measurements. (Can be accessed online: Review #17073365, http://www.unl.edu/buros/jsp/search.jsp.)

The developers of the VIEW have taken a complex and dynamic construct (problem-solving style) and attempted to dismantle it into three component dimensions (OC, MP, and WD). They have done an admirable job in refining the instrument over time, validating their structural model, and providing adequate validation support.

Dissertations and Theses

Aerts, W. (2008). ***Exploring the relationships between problem-solving style and climates in best and worst-case work experiences.*** **Unpublished Masters' Thesis, Department of Business and Economics, Vlekho, Brussels.**

This study looked at person-environment fit within the field of innovation and creativity, specifically examining the relationship between problem-solving style and organizational climate. How do people of different problem-solving styles view their environments differently? Aerts found that were significant differences between individuals o f stronger contrasting problem-solving styles and the climate in best- and worst-case work environments.

Bolner, D. J. (2018). ***A comparison of problem solving confidence and problem-solving styles among teachers and students in multiple high school settings.*** **Unpublished Doctoral Dissertation, Western Connecticut State University, Danbury, CT.**

The purpose of the study is to explore problem solving confidence and problem solving style of students and teachers in different high school settings. Problem solving, as a 21st century skill, is recommended for both teachers and students to improve outcomes in the classroom. Yet, problem solving confidence and styles for neither students nor teachers is well represented in the literature. In this study, data from three instruments will be collected one time from a total of approximately 600 students and 200 teachers in three types of high schools, a regional career technical school; a high school with career technical courses; and a high school without career technical courses in the northeast United States. The first instrument will be a researcher created demographic survey. The second instrument will be VIEW: An Assessment of Problem Solving Style, and the third instrument will be the Problem-Solving Inventory. A multivariate analysis of variance (MANOVA) will be utilized to explain the subscales of problem solving confidence and style. A linear multiple regression (MLR) will be used to predict problem solving confidence using data collected from the demographic surveys and the VIEW.

Crerar, A. (2010). *Predicting career interests from problem-solving style with high school students.* Unpublished Dissertation, Fordham University Graduate School of Education, New York.

This study examined the relationship between problem-solving style and career interests or preferences as measured by the *Kuder Career Search with Person Match* among 342 eighth through eleventh grade students. Explorers displayed a preference for the Kuder Arts/Communication (Artistic) Career Cluster. Externals displayed a preference for the Kuder Sales/Management (Enterprising) Career Cluster. Students with a Person-Oriented had a greater preference for the Kuder Arts/Communication (Artistic) Cluster and the Kuder Social/Personal Services (Social) Cluster while those who had a Task-Oriented decision-making style had a greater preference for the Kuder Outdoor/Mechanical (Realistic) Cluster and the Kuder Science/Technology (Investigative) Career.

Delgado, N. (2019). *The relationship between problem solving styles and servant leadership.* Unpublished Dissertation, Fordham University Graduate School of Education, New York.

This study tested the relationship, if any, of educational leader professionals in the field of education's views of Servant Leadership characteristics and their preferred style of solving problems. As such, it was a construct validity study which tested whether individuals who exhibit certain style preferences also exhibit predicted preferences for behavior and or qualities that are characteristic of servant leadership. Both preferences and qualities are important for educational leaders, teachers, or other school personnel in an increasingly complex, multivariate educational environment, where the goal of developing such 21st century skills as creative problem solving is essential and where leadership qualities within schools effect achievement.

Dorval, K. B. (1990). ***The relationships between level and style of creativity and imagery.*** **Unpublished masters thesis, State University of New York College at Buffalo; Center for Studies in Creativity, Buffalo, NY.**

An examination of the level and style of creativity, and [the preference for] imagery is presented. The Torrance Tests of Creative Thinking (TTCT), the Kirton Adaption Innovation questionnaire (KAI), the Revised Minnesota Paper Form Board (MPFB), and the Individual Differences Questionnaire (IDQ) were administered to undergraduate students (n= 160) enrolled in a general elective class. Results of this study suggest that the relationship between creativity and imagery is more complex than the literature suggests. This study was conducted as a part of the Cognitive Styles Project as a foundation for the development of VIEW.

Fitzjarrell, S. L. (2011). ***A descriptive study of the problem-solving styles of traditional patrol and neighborhood police officers.*** **Unpublished Dissertation, Capella University.**

This descriptive study examined the problem-solving styles of traditional patrol officers (*N* = 106) and neighborhood policing officers (*N* = 34). One recent change in policing strategy has included a shift from traditional policing approaches to a community-oriented approach where officers are assigned to function as problem solvers in the community. This study investigated the problem-solving style differences between officers assigned to traditional patrol duties and those assigned as neighborhood policing officers. There were no significant differences in problem-solving styles between traditional patrol and neighborhood policing officers on each dimension concluding that the samples of police officers in this study were homogeneous in their problem-solving style preferences. A singular significant difference was found between neighborhood policing officer age and the problem-solving style preferences on the OC dimension.

Franklin, J. M. (1997). ***A study of the relationship between cognitive style of creativity and the characteristics of creative product.*** **Unpublished masters thesis, State University of New York College at Buffalo; Department of Creative Studies, Buffalo, NY.**

This study explored the relationship between cognitive style and the characteristics of creative products. The two questions were posed: 1) how do adaptors and innovators evaluate the products of others?, and 2) how do adaptors and innovators view their own work? Members from two Western New York quilting guilds were surveyed along with a student group. Instruments included the Kirton Adaption/Innovation Inventory (KAI), the Survey of Creative and Innovative Performance (SCIP) and the Creative Product Semantic Scale- Short Form (CPSS). Subjects evaluated a traditional quilt and an abstract quilt. While the evidence in this study was not overwhelming, it suggested that cognitive style and perceived level of creativity are not completely orthogonal when evaluating creative products. This study was conducted as a part of the Cognitive Styles Project as a foundation for the development of VIEW.

Geuens, D. (2006). ***Exploratory study of the relationship of problem solving style and the preference for and use of creative problem solving.*** **Unpublished Master in Business Economics study for the Department of Business and Economics of the VLEKHO University for Science and Art. Brussels, Belgium.**

The purpose of this study was to examine the relationships between VIEW and the preference for learning and using of the specific tools, guidelines, stages and components of the current version of creative problem solving. There were significant relationships between all three dimensions of VIEW and various CPS tools, guidelines and process stages.

Hoßbach C. & Lange, F. (2015). ***Entwicklung und Validierung der deutschen Testversion von VIEW: An Assessment of Problem-Solving Style – Eine Studie zum Problemlösungsverhalten von Menschen.*** **(Development and validation of the German test version of VIEW: An Assessment of Problem-Solving Style. A study of people's problem-solving behavior. Unpublished Thesis, Magdeburg-Stendal University of Applied Sciences, Department of Economics – Dual degree in Business Administration and Human Resources Management.**

Creativity, innovation, leadership and change are interconnected. Therefore, a systemic approach to these terms is necessary. There is no innovation without creativity. Consequently, organizations can benefit from considering this topic in order to use the creative potential of their employees to generate innovations. VIEW: An Assessment of Problem Solving Style enables people to gain knowledge about their preferred behaviors and how they use their creativity when solving problems. On the basis of the original English version, a German test version has been developed in this thesis. An exploratory study shall give evidence of its quality. The target is to identify possible mistakes of the translation in order to identify the items that need to be revised. Furthermore, a prospect for future research will be given.

Hoßbach, C. (2017). ***Exploring the influence of distinct types of individual differences on the perception of organizational climate.*** **Unpublished Masters' Thesis, Martin-Luther University, Halle-Wittenberg, Germany.**

This thesis followed a relatively new approach to examining the impact of individual differences, including individual problem-solving style, on the perception of creative climate by asking people to recall a positive and negative work situation in which they felt most and least creative and to assess the climate for creativity in these critical situations. A multi-method approach was taken to assess the climate for creativity from a quantitative and qualitative perspective. Assessments of creative climate in a best- and worst-case work situation were collected from 123 participants. The results suggest that participants of different problem-solving styles and gender had different perceptions of the climate in which they felt most or least creative. Especially those tending towards an exploratory approach to problem-solving perceived a larger difference of creative climate in their best- and worst-case situation and had different perceptions concerning the degree of autonomy that supported or inhibited their creativity. Participants tending towards an external approach to problem-solving reported higher levels of interaction, support for ideas and risk-taking as supportive to their creativity. Furthermore, higher levels of trust were observed as an enabling condition among participants preferring a person-oriented approach to problem-solving. Gender differences were mainly found concerning the perception of risk-taking and the quality of interpersonal relationships as well as the negative impact of personal tensions. Furthermore, potential interaction effects between gender and problem-solving style were observed. Implications of these findings for research and practice are discussed and a prospect for future research in this area is given.

Lin, Chin-Yi (Melanie). (2005, August). *How do the problem-solving styles measured by the VIEW differ in departments?* Case study in a media industry in Taiwan. Unpublished Masters' Thesis, Cass Business School, City of London (UK).

The researcher used VIEW to assess the problem-solving styles of employees in the GTV Corporation and to assess differences among departments. The problem-solving style of the organization reflected a Developer preference with Person orientation and Internal focus, with an identified need of recruiting more Explorers. The compatibility between employees' job characteristics and problem-solving styles existed in half of the departments. Although no serious HR problems were demonstrated, HRM modifications are certain. The results were also distinctive from previous VIEW researches, and illustrated the great difference in problem-solving styles of individuals with different cultures.

Larsson, E. (2009). *Simulation training of boat handling: Contributions of problem solving style, spatial ability, and visualization.* Unpublished Doctoral Dissertation, Fordham University, New York, NY.

Officers from two major inland towing companies took part in a study that examined the contributions of problem-solving style using VIEW, spatial ability, and visualization using existing measures to the simulation of boat handling. The researcher postulated that due to the nature of the job performed by these officers they would have above average spatial ability and visualization skills, and that their problem-solving styles would be similar because of the rigors of the job of navigating an inland towing vessel. Results in the study showed above average scores in spatial ability, but below average scores in visualization ability. A large majority of Captains and pilots had similar problem-solving styles.

Maghan, M. A. (2008). *Problem solving style and coping strategies.* Unpublished Doctoral Dissertation, Fordham University, New York, NY.

This study examined the relationship between coping style and problem-solving style, hypothesizing that individuals' self-reported coping style would be congruent with their generalized problem-solving style and that when responding to a problem situation, participants will prefer coping strategies consistent with their preferred style.

Mandelbaum, M. G. (2013). *Problem solving style, teaching style, and teaching practices among in-service teachers.* Unpublished Doctoral Dissertation, Fordham University, New York, NY.

This study hypothesized that teachers with different, but well-developed problem solving styles would have distinctly different teaching styles, in turn affecting their preferences for certain teaching practices, classroom activities, and interactions. The study involved 114 secondary private school teachers. Results revealed that teachers' high valuation of people, novelty, and autonomy when solving problems predicted their ability to teach in an individualized, social way, and predicted their utilization of caring and supportive teaching behaviors. Additionally, teachers' ability to process information internally when making decisions predicted their ability for structured and rational teaching styles.

McCann, E. W., Jr. (2008). *Cognitive Effect Indicators: The Impact of Student and Teacher Styles on Course Grades.* Unpublished Masters' Thesis, Virginia Polytechnic Institute and State University, Blacksburg, VA.

This study summarized the problem solving and learning styles of students enrolled in a university-level Agricultural Technology program, identified relationships between problem solving and learning styles, and used problem solving and learning styles to explain students' end of course grades. Ninety-three students and six faculty members participated in the study. There were differences between degree options in Orientation to Change. Second year students were likely to be Internal processors. There were no significant differences in Ways of Deciding. However, Agricultural Technology teachers were more Task oriented problem solvers, while their students were Person oriented. Teachers were more field independent than the students. There were no relationships between problem solving and learning style. There was a high degree of association between student Ways of Deciding and Manner of Processing. Student Orientation to Change, student Manner of Processing, teacher Manner of Processing and teacher Ways of Deciding scores produced a model that significantly explained end of course grades. Suggestions for further research included identifying other career areas with stylistic trends and further identifying the impact of style on student behavior.

Michotte, J. (2010). ***Examining differences in problem-solving style and the effects on generating and focusing options in the front end of innovation.*** **Unpublished Masters' Thesis, Hogeschool-Universiteit Brussel – Faculty of Economics & Management, Brussels, Belgium.**

This research addressed the earliest phase of product and service innovation, known as the Fuzzy Front End (FFE), seeking to help businesses improve their approach to innovation projects and increase their competitive advantage. The study sought to examine, develop and formulate best practices in the FFE. It also aimed to examine the influence of Problem Solving style on generating and focusing phases of FFE projects. Third, it formulated a framework for managing the FFE. The leading research question was: 'Do individuals of specific Problem Solving styles make different levels of contribution to "front end of innovation" projects?' The results indicated that all dimensions of Problem Solving style have influence on generating and focusing, albeit on different levels and in different phases of the projects. Participants of Explorer and External style preference tended to perform better on fluency of generating. Raters viewed the options generated by People-oriented decision makers as most valuable, although ideas that initially seemed valuable did not always end up in concept development phases. Conversely, ideas that are initially overlooked may still prove to be of value in later phases.

Onkelinx, J. (2004). ***Stylen van creativiteit en problemoplasen binnen teams (Different styles of problem solving within teams).*** **Unpublished Masters Project, Hogeschool voor Wetenschap & Kunst, Brussels, Belgium.**

This thesis involved the initial translation and validation of the VIEW instrument into Dutch. The researcher described procedures for the back translation as well as the correlation with the Dutch versions of other instruments. The results of the study supported the reliability, validity, and general usefulness of the Dutch translation of VIEW.

Scheinholtz, J. (2008). *Effects of positive mood on generative and evaluative thinking in creative problem solving.* Unpublished Doctoral Dissertation, Fordham University, New York, NY.

The goal of this study was to examine the role of positive mood on generative and evaluative thinking in creative problem solving. Participants included 89 middle school students induced into a positive or neutral mood while completing a problem-solving task. Students in a positive mood were significantly more generative. Participants in the neutral-mood condition generated more disadvantages than advantages, but this difference was significant. The author discussed the implications and limitations of these results.

Schoonover, P. F. (1996). *The preferences for and use of Creative Problem Solving tools among innovators and adaptors.* Unpublished Doctoral Dissertation, Minneapolis, MN: Walden University.

The results of this study provide a better understanding of how and why adaptors and innovators use various CPS tools. Innovators felt more positively about themselves as problem solvers and also more positively about the Creative Problem Solving process. Adaptors expressed more self-doubt in interviews and written comments. The author discussed implications for training participants with different styles, and the relationship between participants' responses to the CPS process and their own preferences as creative problem solvers.

Skovli, T., & P. & Myhre, P. O. (2015). ***An examination of problem-solving style differences in best and worst-case work environments.*** **Unpublished Masters' Thesis. BI-Norwegian Business School, Nydalen, Norway.**

This multi-method study examined the relationships between creative climate via the Situational Outlook Questionnaire (SOQ) and individual problem-solving style via VIEW: An Assessment of Problem Solving Style. The aim was to examine the differences observed between best and worst-case climates and preferred problem solving style. One hundred and fifty-seven participants responded to the SOQ twice – once for best and another for worst-case work experiences. All participants also completed VIEW. Numerous differences, both quantitative and qualitative, were found such that individual styles identified meaningful distinctions between what made for a best and worst-case work environment.

Southwell, D. A. (2015). ***Creativity in education: Exploring the problem-solving preferences of college students.*** **Unpublished Doctoral Dissertation, Fordham University, New York, NY.**

One hundred and seven undergraduate college students were identified as being engaged in extra-curricular activities on campus. It was hypothesized that these individuals would have preferences that tended toward Developer, Task-Focused, and External. It was further hypothesized that longevity in various activities would be associated with an External style. Findings, based on students' scores using VIEW: An Assessment of Problem Solving Style, indicted engaged students tended to be Developers and were marginally Task-Focused. No relationship was found between longevity of activity and Manner of Processing.

Tamvakolgos, K. M. (2018). ***Problem solving style and leader follower relationships: A test of leader-member exchange theory*****. Unpublished Doctoral Dissertation, Fordham University, New York, NY.**

Based on Leader-Member Exchange and problem solving style theories, the purpose of the study was to test the hypothesis that teachers with perceived styles similar to their supervisors will have more positive perceptions of their supervisor-subordinate relationship. One-hundred ten teachers were recruited by Qualtrics to complete surveys about supervisor and teacher problem solving styles, and teachers' perception of a positive or negative supervisory relationship. The main study hypothesis was not supported. Neither perceived problem solving styles of supervisor nor teacher were related to supervisory relationship. Teachers who completed VIEW: An Assessment of Problem Solving Style appeared moderately Developer as opposed to Explorer and similar to the over-2000 teachers already in the VIEW database. In addition, teachers in this study appeared to judge more positive relationships with former supervisors than current ones. Teachers' age, gender, and years of experience did not affect the relationships observed.

Tefft, M. E. (1990). ***A factor analysis of the TTCT, MBTI, and KAI: The creative level-style issue re-examined.*** **Unpublished Masters' Thesis, International Center for Studies in Creativity, State University College at Buffalo.**

This study examined level and style using three creativity measurement instruments, the Torrance Test of Creative Thinking (TTCT), the Myers-Briggs Type Indicator (MBTI) and the Kirton Adaptation-Innovation Inventory (KAI). Analyses of the subscales within each instrument included Pearson-r correlation and factor analysis. The results indicated that MBTI and KAI were measures of style while the TTCT was a measure of level. This study was conducted as a part of the Cognitive Styles Project as a foundation for the development of VIEW.

Vazquez, S. (2013). *Examining the relationship of problem solving style to school achievement in high school students.* Unpublished Doctoral Dissertation, Fordham University, New York, NY.

This study investigated the relationships between students' problem solving style and their achievement on standardized tests and teacher-assigned grades. Higher achieving students tended to be characterized by Developer, Internal, and Task style preferences. The strongest correlations were found between standardized achievement measures and the Manner of Processing (MP) and Ways of Deciding dimensions (WD). MP scores correlated significantly with English grades, Math grades, state achievement test scores in Language Arts, Math, and Science. WD scores were significantly correlated with state test results in Language Arts, Math, and Science. For OC, English grades correlated significantly. There were also some gender differences. The results of this study suggested that the Developer-Internal-Task-oriented styles have an advantage in the types of achievement typical in schools today.

Woodel-Johnson, B. L. (2010). *Creativity, learning style, and problem solving style of talented secondary school students.* Unpublished Doctoral Dissertation, Department of Education and Educational Psychology, Western Connecticut State University. Danbury, CT.

This study investigated the relationships among creativity (Verbal and Figural *TTCT* scores), learning style (Rundle & Dunn, *Building Excellence*), and VIEW problems solving styles among talented high school students. The sample included 105 students with identified strengths in science, visual arts, or athletics from three high schools, and included both quantitative analyses and interviews with selected students in each talent domain. Student perceptions of their creativity, learning styles, and problem-solving styles showed differences and similarities among and between talent domains.

Zmudka, D. A. (2006). ***The relationship between creativity style and music career in university music students.*** **Unpublished Masters' Thesis, Western Michigan University, Kalamazoo, Michigan.**

This study investigated the relationship between creativity style and choice of musical career among 74 students enrolled in one of four majors in music: music education, music therapy, instrumental performance and jazz performance, as assessed by VIEW. Subjects also provided demographic information concerning their declared major, preferred musical career, and level of education. The four groups differed significantly on the OC and WD dimensions when using preferred musical career as the category variable. No differences were found when declared major was used as the category variable. Results suggested that problem-solving style is likely to be associated with problem types found in specific musical activities and therefore a musician's preferred career in music. The author discussed implications for music education and teaching creativity.

Conference Papers and Presentations

Babij, B. (2008, May). *Vitality or cancer in the c-suite.* Creativity and Innovation Management: An International Conference. Buffalo, NY.

Chief Executive Officers (CEOs) and their seconds in command arguably the most visible people in any organization. The nature of the relationship between these two, therefore, can have enormous impact on the health and success of a company. The purpose of this study was to explore some of the functional and dynamic elements of this relationship through a case study using two creativity assessments: VIEW, a measure of problem-solving styles, and Situational Outlook Questionnaire (SOQ), a measure of creative climate. Two CEO/COO pairs completed both measures. Their results suggested that these two measures could be used to design interventions that would sustain, repair, or strengthen this key relationship.

Breen, D., Selby, E., Zusho, A., & Houtz, J. (2009, January). *Factor structure of VIEW: An assessment of problem solving style.* Abstract presented at the Fourth Annual International VIEW Networking Conference, Sarasota, Florida.

Three hundred thirty female graduate students (ranging in age from 20 to 74) completed VIEW. Both exploratory and confirmatory factoring procedures were conducted. In every combination of exploratory factorings, the items corresponding to the two dimensions, Manner of Processing and Ways of Deciding, had clear primary loadings on their respective dimensions. When forced into three-factor solutions, the 18 items corresponding to the dimension of Orientation to Change had primary loadings on the first factor, with MP and WD dimensions the second and third factors, respectively. Confirmatory factor analysis suggested, however, that the three-factor solution was not the best "fit" for the current data. The analyses in this study suggested that the dimension of Orientation to Change is complex, and may involve other factors or even hierarchical factors. More research is warranted.

Burger, C., Marino, C., Ponterotto, J., & Houtz, J. (2009, January). *Problem solving style and multicultural personality dispositions.* Presented at the Fourth Annual VIEW Networking Conference, Sarasota, Florida.

Fifty-one graduate psychology students (45 female and 6 male), ranging in age from 22 to 75, responded to VIEW and *The Multicultural Personality Questionnaire* (*MPQ*). The researchers computed partial correlations among *VIEW* and *MPQ* scores, controlling for age and gender. Among *VIEW* scores, only the correlation between OC and WD was significant, suggesting that a Developer style and Task-oriented style were positively related as were an Explorer style and Person-oriented style. Among *MPQ* scales, there were numerous significant correlations. Correlations of MPQ with VIEW-OC suggested that an Explorer style, open-mindedness, social initiative, emotional stability, and flexibility were positively related. Correlations with MP suggested that External style, social initiative, and flexibility were positively related. There were no significant relationships observed between problem solving style and cultural empathy or between Ways of Deciding and multicultural personality orientation. Results of this study provided additional evidence of the construct validity of *VIEW* and the importance of further efforts to understand different styles of behavior. One disappointing result was the lack of significant correlations of Ways of Deciding with cultural empathy. *VIEW* theory would have suggested a correspondence between a Person-oriented style and greater cultural empathy. The sample's very high mean (and corresponding "restriction of range") on Cultural Empathy may have accounted for the absence of correlation with problem solving style; more research is warranted.

De Schryver, L., Onkelinx, J., & Isaksen, S. (2006, January). ***Assessing problem solving style: An initial report on reliability and validity of the Dutch VIEW.*** **An invited paper to Using VIEW Creatively: A Networking Conference. Sarasota, Florida.**

The researchers described the need for a Dutch translation of VIEW d after working with many different groups in Belgium. The purposes of this article were to examine the reliability, validity, and stability of the Dutch translation of VIEW.

De Schryver, L., & Shephard, W. (2007, October). ***VIEW: A tool to improve teamwork for transformation.*** **European Conference on Creativity and Innovation (ECCIX), Copenhagen, Denmark.**

This multi-lingual presentation focused on the use of Problem Solving Style with teams responsible for transformation in organizations. The presenters briefed participants on the VIEW Assessment, provided feedback on their individual results, and then discussed the implications of those results when working in groups. They presented a case study to illustrate how the results might be used with teams for transformation.

Delcourt, M. (2013, August). ***Learning and development with style.*** **A symposium on individual differences in creativity and problem solving presented at the American Psychological Association Convention, Honolulu, Hawaii.**

With the recognition that creativity has many facets or dimensions, researchers, theorists, and practitioners have expanded an understanding that people can be creative in many ways. Our research on problem-solving styles, learning styles, and creative thinking among secondary school students has yielded results that, while preliminary in scope, clarify the varied creative strengths of students in relation to those style variables, but also in relation to talent domains. We have found significant relationships between learning styles and problem-solving styles, and both similarities and differences among students talented in athletics, science, and visual arts. Students talented in the visual arts, for example, were significantly more global than those with talents in athletics, while the athletes demonstrated a greater preference for structure than either of the other two talent groups. The students in the science talent group demonstrated significantly greater preference for a Internal Manner of Processing style than those in the other two groups. We found evidence to support the independence of level of creativity, in relation to verbal and figural divergent thinking and problem solving style, with no significant correlations among the students on those measures. On the other hand, some learning style variables were correlated with divergent thinking. Verbal fluency, for example, was positively correlated with impulsivity and verbal originality correlated significantly with the learning style preference for variety when working on complex tasks. Our initial results supported the principle that problem-solving style and learning style assessments yield both common and unique insights into student creativity and talent. Student profiles revealed domain specific characteristics of talented students. Implications relate to the role of learning styles and problem-solving styles in understanding and describing students' creative characteristics.

Hanakis, M. (2011, May). *A teacher's judgment of problem solving style and high school seniors' problem solving choices.* Poster presentation, Association for Psychological Science, Washington, DC.

This study investigated whether a teacher could accurately assess his students' problem solving styles and whether students with measured styles will make choices consistent with those styles. Seventy-five high school seniors responded to VIEW. Then, students completed a survey on style titled *What Would You Do* that asked how they would choose to respond to specific situations. Lastly, the teacher received descriptions of different problem solving styles and nominated up to three students that he believed exhibited those styles. Results indicated that neither the teacher's nominations nor students' own choices on *What Would You Do* matched in the majority students' tested styles on *VIEW*. Those matches that were observed among students and the teacher, however, were in the nature of Developer, External, and Task-oriented Decider. Explanations offered included the type of school culture typically rewarded (Developer, Task-orientation) and current curriculum and age-appropriate factors, such as more group activities and peer focus in the senior teen grades (External processing style).

Hanakis, M., Houtz, J., & Selby, E. (2013, June). Problem solving style of high-school students. Poster presentation, Association for Psychological Science, Washington, DC.

Forty-seven high school seniors responded to VIEW and a survey of how they would choose to respond to specific situations. Results did not suggest major imbalances in number of students with different styles or students' responses to specific situations, but did suggest in several cases that individuals with different styles might respond differently. With respect to OC styles and the OC Search Strategy subscale students who chose *"Hold off interacting until you feel secure with others in the group and you have had time to think about the project"* scored more Developer than students who chose, *"Be one of the first persons to talk, sharing information about yourself and the direction you would like to see the team go."* With respect to MP styles, students who chose *"Concerned with broad actions that demonstrate flexibility, and let others worry about the details"* scored more External than students who chose other options. In addition, students who chose *"Find yourself preferring to work alone"* scored more Internal compared to students who chose other options.

Houtz, J. C. (2011, May). *Students' academic choices as a function of problem solving style.* Poster presentation, Association for Psychological Science, Washington, DC.

Twenty-seven undergraduate students enrolled in an educational psychology class completed VIEW. Students were then assigned to one of eight groups of 3-4 students each, equated partially for styles. Each group prepared and presented to the class a 15 minute power-point/multimedia summary of the chapter content. After the group presentation, each student in the group responded to four questions: 1) How satisfied are you with your group's overall final "product?" 2) How easy or difficult was it to get started? 3) How satisfied were you with your individual contribution? 4) Would you recommend this type of project again? In addition, for a final, individual project, students chose one of three types of "papers" to complete this requirement. On Manner of Processing, the External-styled students recommended that the group project be used again statistically significantly more than the Internal-styled students. With respect to styles and student choices of final term project, students who chose the observation/case study assignment were more Person-oriented. Both significant results are consistent with style theory.

Houtz, J. C., Matos, H., Park, S., Scheinholtz, J., & Selby, E. (2006, January). *Problem solving style and motivational attributions.* Paper presented at the annual networking conference of the Center for Creative Learning, Inc., Sarasota, FL.

Fifty-two Master's-level female graduate students completed VIEW and provided attributions for their successes and failures according to several categories of reasons in the form of percentages to the categories: skill or ability, effort devoted to the task, task difficulty, chance, or other factors, after Weiner's theory of motivation. Women scoring as more Developer than Explorer on VIEW attributed a greater percentage of their failures to uncontrollable factors (chance and task difficulty). These results are consistent with the theory that individuals with a Developer style are more organized, deliberate, "planful" and precise in their work efforts. Thus, such individuals would more likely attribute failure to factors they had not foreseen.

Houtz, J. C., & Selby, E. C. (2008, January). *Problem solving style, creative thinking, and problem solving confidence.* Abstract presented at the Center for Creative Learning 2008 VIEW Networking Conference, Sarasota, FL.

Forty-two undergraduate and graduate students completed VIEW, the non-verbal Torrance Test *Thinking Creatively with Pictures*, and the *Problem-Solving Inventory* (PSI). The TTCT-Figural measures several productivity measures, notably ideational fluency. The non-verbal form also yields one "process" score: resistance to closure. Finally, the *Problem-Solving Inventory* measures individuals' confidence in and affective control of their problem solving process, plus an indication whether an "approach" or "avoidant" style is characteristic. Consistent with *VIEW* theory, there was no relationship between actual creative thinking production and problem solving style. However, *VIEW* OC and WD scores were correlated significantly with TTCT resistance to closure. Explorers (OC) and Person-oriented deciders (WD) were more resistant to closure.

Houtz, J. C., Zusho, A., Doheny, D., Selby, E., Treffinger, D. J., & Isaksen, S. G. (2008, January). *Confirmatory factor analysis of VIEW: An assessment of problem solving style*. Abstract presented at the VIEW Networking Conference conducted by the Center for Creative Learning, Inc., Sarasota, FL.

Using the database of over 10,000 VIEW scores, confirmatory factor analyses tested both three- and five-factor solutions. VIEW demonstrated a sound factor structure, although future research should investigate ways to further improve it.

Isaksen, S. G. (2006, September). *Exploring the relationship between problem-solving style and creative psychological climate. An invited paper presented to Milieus of Creativity Symposium* – Second Interdisciplinary Symposium on Knowledge and Space. Hosted by the Geographisches Institut of the University of Heidelberg and the Klaus Tschira Foundation, The Villa Bosch, Germany.

This presentation provided an overview of a research study on the relationships between VIEW: An Assessment of Problem Solving Style and the Situational Outlook Questionnaire. Although we found few significant correlations between problem-solving style we did uncover meaningful qualitative differences in the nature of the work environments preferred by individuals with different styles.

Isaksen, S. G. (2013, August). *Individual differences in creativity and problem solving.* A symposium presented at the American Psychological Association Convention, Honolulu, Hawaii.

This presentation set the framework for a symposium on "a deeper look into problem-solving style and creativity," looking beyond the primary psychological focus on personality and level or capability ("How creative am I?") to style ("How am I creative?").

Isaksen, S. G. (2017, February). The Leadership Challenge of Fostering Collaboration in a VUCA World. A workshop provided at the Society of Consulting Psychology Conference on The Next Wave of Leadership – Accelerating Development: Increasing Impact in Seattle, Washington (February 8-12, 2017).

This presentation highlighted the use of VIEW in a major organizational change effort. A large acquisition took place and VIEW was applied for the leadership teams of both organizations through a program called "ready to run."

Isaksen, S. G., & Aerts, W. (2009, January). *Exploring the relationship between problem-solving style and climates in best and worst-case work experiences.* A presentation at the Fourth Annual International VIEW Networking Conference, Sarasota, Florida.

This presentation provided a summary of work by Isaksen and Aerts to understand the relationships between VIEW and perceptions of individuals' best and worst-case working environments.

Isaksen, S. G., & Aerts, W. (2009, January). *A cross cultural examination of creative problem solving style.* A presentation at the Fourth Annual International VIEW Networking Conference, Sarasota, Florida.

This presentation provided a summary of the translation project aimed at validating the Dutch translation of VIEW.

Isaksen, S. G. & Kaufmann, A. (2013, February). Problem solving and personality. In invited keynote to the Management Forum hosted by the Norwegian Business School, Bergen, Norway.

This presentation was sponsored by the Norwegian Business School's Department of Leadership and Organizational Behavior and provided participants an overview of VIEW: An Assessment of Problem Solving Style and the emerging personality profile of each of the styles. Specific correlational results supporting the validity of VIEW were reported and avenues for future research were outlined.

Isaksen, S. G., & Treffinger, D. J. (2002, June). *Supporting organizational transformation and change: A new VIEW.* A presentation at the Annual Creative Problem Solving Institute. Creative Education Foundation, Buffalo, NY.

This presentation provided participants an introduction to the VIEW assessment and its applications.

Landers, A., Houtz, J., & Selby E. (2012, June). *Problem solving style and personality characteristics*. Poster session presented at the APS Convention, Washington, DC June 24-26, 2013.

One hundred three undergraduate and graduate students (25 males and 78 females), ages 19- 40 completed VIEW and a 40-item self-checklist of personal characteristics. On OC, the Explorer style correlated significantly with rule-bending, being easy-going, curious, humorous, and restless, while the Developer style correlated significantly with being a goal-setter, detail-oriented, clear-headed, conscientious, logical, organized, and results-oriented. For MP, External style was associated with being a team leader, a consensus-builder, seeking group activities, and being person-oriented were correlated; the Internal style correlated with being a quiet thinker, a loner, and independent-minded. On WD, the Person-oriented style was correlated with being a peace-maker, while the Task-oriented style correlated with being a completer, results-oriented, a goal setter, and clear-headed. The results consistent with VIEW theory.

Larsson, E. K. (2008, January). *Problem solving style, spatial ability and visualization measures for inland towboat officers.* A paper presented at the Third Annual International VIEW Networking Conference, Sarasota, Florida.

A preliminary report of the design, results, and implications of the presenter's doctoral dissertation; see Larsson (2009), above.

Lofquist, E. (2013, August). *Organizational applications of problem-solving style.* A symposium on individual differences in creativity and problem solving presented at the American Psychological Association Convention. Honolulu, Hawaii.

Understanding, appreciating, and effectively utilizing differences in problem-solving style has great value for those who work in organizations. The organizational applications of problem-solving style range from helping leaders better deal with diversity on their management teams and developing strategies together, to helping project and work teams understand how they can work better together to deliver improved results. From a practical point of view, problem-solving style can offer value whenever individuals and groups must work together to make change happen. The presentation summarized a case study dealing with real organizational change, focused on a three-year organizational change project within the Norwegian air navigations services provider.

Maghan. M. (2007, May). *Problem solving style and coping style.* Paper presented at the annual conference of the American Psychological Society, New York.

This study examined the relationship between coping style and problem solving style. The researcher hypothesized that individuals' self-reported coping style would be congruent with their generalized problem solving style and that when responding to a problem situation, participants will prefer coping strategies consistent with their preferred style. One hundred seven community college students completed VIEW and the COPE Inventory. Participants were randomly assigned to one of three vignettes, describing a problem situation of high stress, low stress, and a non-stress, neutral situation. Seven dependent variables were analyzed: participants' ratings of the degree of stress they perceived in the problem situation, and six ratings of their perceptions of the usefulness of particular problem solving strategies for the problem situation described in the vignette that were keyed to VIEW problem solving styles. The VIEW senior author categorized the problem-solving strategies as representative of VIEW styles. Multivariate analyses of covariance using participant-reported grade-point-averages revealed significant main effects for experimental group (stress-level of vignettes) but no main effect for VIEW style of participants. Participants clearly perceived differences in stress levels of vignettes. As for rating the usefulness of problem solving strategies, generally, higher ratings were given to Explorer, Developer, Person-oriented and Task-oriented strategies in the Low Stress condition. A few significant correlations were observed between VIEW and COPE, suggesting a commonality of a "conservative" problem solving approach. The researcher discussed the results in terms of problem solving theories, implications for practice, and suggestions for future research.

Matos-Elefonte, H. (2011, May). ***Problem solving style and scholastic aptitude test performance.*** **Poster presentation, Association for Psychological Science, Washington, DC.**

The researcher studied a sample of 40 high school juniors and seniors taking the Scholastic Aptitude Tests for college admission applications, comparing their mathematics test scores to scores on VIEW. Higher mathematics achievement corresponded to a Task-oriented decision-making style. In addition, a more Explorer style was positively associated with higher education goals. The Developer style and mathematics (but not verbal) achievement both are thought to rely on logical and detail-oriented thinking. The very nature of mathematical problem solving involves recognition and application of appropriate structures (equations, theorems, etc.) and rules by which structures can be manipulated. As for the finding about Explorers, style theory suggests that Explorers are more open to rule-breaking or "rule-ignoring," so it is quite plausible that individuals taking the SATs might feel less bound by any test scores, think that they can achieve no matter what, and thus check that they have higher educational aspirations.

McCoy, F., & Houtz, J. C. (2011, May). *Problem solving style and creative productivity.* Poster presentation, Association for Psychological Science, Washington, DC.

As a freshman orientation project, 456 freshmen education students created 5-10-minute multimedia PowerPoint/movie presentations in response to one of several prompts about education, learning, and teaching. Students who completed VIEW were assigned to working groups of 6 students each based on their VIEW scores such that team members were similar on the three dimensions of problem solving style. Researchers scored students' presentations for clarity of theme, supporting details, and use of multi-media to enhance the message. Generally, Developers, internal processors, and task-oriented deciders received higher ratings. Of greater import, perhaps, was that ratings for supporting details and use of media to enhance the message were higher for "style-matched" teams than non-matched teams. Follow-up satisfaction surveys revealed that Internals rated more highly than Externals that their team had a good leader. Developers more than Explorers wanted more technical support. Person-oriented Deciders had more trouble in their team dividing up the work. And Explorers more than Developers would recommend that this project be continued.

Proestler, N., & Vazquez, S. (October, 2011). ***Factor structure of VIEW.*** **A paper presented at Northeastern Educational Research Association, 42nd Annual Conference, Hartford, CT.**

The study examined the factor structure of VIEW. The researchers constructed an initial model according to perspectives in the literature. It described direct paths between the questions and area or constructs OC, WD and MP. The initial model was not consistent with the appropriate goodness of fit criteria and was modified over two different steps to a preferred or final model. The final model represented small but significant correlations between the constructs (OC-WD .13, OC-MP .12 and MP-WD .09) and the factor structure of VIEW was within high significant correlations between the new parcels within the construct. (.69 to .88) and small but significant correlations in between the parcels of one construct to another construct (.06 - .11). This suggested that the parcels were accurate representing the construct they stood for, but had influences on the other construct. Especially OC and WD were somehow related concerning their item fit. Further research is needed to determine how well the items actually represent their construct and which parcels of items would be theoretically the best concerning the construct validity of the VIEW.

Selby, E. (2013, August). ***A rationale for focusing on problem-solving style and creativity.*** **A symposium on individual differences in creativity and problem solving presented at the American Psychological Association Convention, Honolulu, Hawaii.**

The presenter explained the rationale and development of VIEW. He reviewed the goals and purposes of the instrument, our definition of problem-solving style, and the distinctions among several topics frequently confused or used as if they were interchangeable, including problem-solving style, learning style, cognitive style, and psychological type. He also discussed the use of the instrument in helping individuals understand their own style, and to appreciate the strengths of others so that they might improve their effectiveness whether working alone or in groups. Awareness of problem-solving style is important for individuals to guide them in understanding their personal creative strengths, providing them a path towards the realization of their full creative potential. It can contribute to the level of one's productive output. It has enabled groups to be more efficient and effective, and to strengthen collaboration and teamwork when solving problems and managing change.

Selby, E., & Treffinger, D. (1999, November). ***Enhancing talent development projects using creativity style.*** **Convention of the National Association of Gifted Children, Albuquerque, NM.**

This presentation shared the results of VIEW Assessment in a project for school district leaders and coordinators of gifted education. Teams responded to VIEW, received their results, and discussed the implications for their efforts to plan and implement programming for talent development.

Selby, E., & Treffinger, D. (2001, November). *Creativity assessment: Practices, pitfalls, and possibilities.* Convention of the National Association of Gifted Children, Cincinnati, OH.

This presentation addressed issues and resources for assessing creativity, with an emphasis on looking beyond "cutoff scores" on a single test, developing profiles of creative strengths, and considering style as well as level.

Selby, E., & Treffinger, D. (2003, November). *Creativity assessment: Untangling level and style.* Convention of the National Association of Gifted Children, Indianapolis, IN.

This presentation addressed the creativity level and style question, with an emphasis on identifying creative strengths and talent development in young people.

Selby, E., & Treffinger, D. (2005, August). *Problem-solving style: New ways of understanding individual creative differences.* Sixteenth Biennial Conference: World Council for Gifted and Talented Children: New Orleans, LA.

This presentation included an overview of VIEW's dimensions and styles, with emphasis on recognizing and responding to individual differences, with consideration of VIEW's cross-cultural potential for research and instruction.

Sokolowska, J. (2006, April). ***Individual differences in dimensions of temperament and problem solving style: Cognitive aspects of behavioral tendencies.*** **Presented at the annual conference of the American Educational Research Association. San Francisco, CA.**

Temperament types and problem solving styles present similarities in the ways they are conceptualized. The purpose of this study was to investigate how the two constructs relate to each other in terms of cognitive and behavioral tendencies among graduate students of psychology. The sample was taken from 61 graduate students of an urban non-public university. The results showed that there is a link between temperament and problem-solving styles. Specifically, the correlations between Orientation to Change and Functioning, as well as Manner of Processing and Contact Ability were statistically significant.

Stead, S. J. (2008, May). ***A new VIEW of customers: A case study in using a problem solving style assessment as a customer profiling tool.*** **Creativity and Innovation Management: An International Conference. Buffalo, NY.**

This case study examined the creative use of VIEW as a customer-profiling tool. A direct marketing company used VIEW to better understand the drivers of its customers' behaviors. The application of the insights to key business challenges led to powerful and profitable innovation.

Steinmetz, M. (2017). *The relationship between problem solving style and conventional, social, and enterprising career types*. Unpublished Dissertation, Fordham University Graduate School of Education, New York.

This study analyzed the relationship between three of Holland's career types and Problem Solving Style as measured by VIEW: An Assessment of Problem Solving Style. Findings reveal that people in Conventional type of careers were most likely to have Developer and Task-focused Problem Solving Styles. People in Enterprising careers were most likely to have an External Problem Solving Style. People in Social types of careers were most likely to be Person-focused in style. These findings enhance the career development and career choice field by helping people make more informed decisions as to appropriate careers based on their unique selves.

Treffinger, D. J. (2013, August). *The validity of problem-solving style.* A symposium on individual differences in creativity and problem solving presented at the American Psychological Association Convention, Honolulu, Hawaii.

Engaging diligently in instrument development enhances one's respect for the complexity of the admonition that "tests should be valid." Our experiences over the past decade have taught us many lessons about validation's challenges. These included: (1.) reaffirming that validation is a long-term, ongoing process, not a single event; (2.) evidence for validity, and how we choose to interpret it, often depends on assumptions we make about the underlying construct we seek to measure; (3.) validation requires the informed and rigorous involvement of many scholars. The presenter summarized our progress described work in progress, and identified emerging opportunities and challenges.

Tuzzo, A. C. (2007, August). ***Factors that contribute to the creative achievement of women.*** **Presented at the annual conference of the Honor Society for Women Educators, London, England.**

Thirty members of an international organization of women who have been recognized for their lifetime achievement in various careers and/or volunteer efforts, agreed to complete VIEW and a survey of biographical factors (e.g., background, education, interests and hobbies, creative activities and achievements, and professions). Developers rated themselves detail-oriented, reliable, conscientious, logical, as "completers," and organized. Explorers rated themselves as rule-benders and restless. Internals rated themselves as quiet thinkers, conscientious, and as "loners." Task-oriented Deciders rated themselves as detail-oriented while Person-oriented Deciders rated themselves as "networkers."

Distance Learning Modules

Treffinger, D. J., Bishop, B., Henderson, K., Schoonover, P., Shepardson, C., & Shepardson, R. (2011). *Characteristics and Creativity: Style*. Sarasota, FL: Center for Creative Learning.

This module, one of 13 in the Creative Problem Solving in Education series, represents about three hours of reading and study. The module provides an overview of VIEW's three dimensions and six problem-solving styles, and examines the implications of VIEW for teaching and learning CPS.