

JITP

Journal of Invitational Theory and Practice



Volume 24, 2018

The Journal of Invitational Theory and Practice (JITP) promotes the study, application, and research of invitational theory. It is an online peer reviewed scholarly publication presenting articles to advance invitational learning and living and the foundations that support this theory of practice, particularly self-concept theory and perceptual psychology.

The International Alliance for Invitational Education® (IAIE) is chartered by the State of North Carolina. The IAIE is a not-for-profit group of educators and allied professionals throughout the world, dedicated to the development of positive school, work, and home environments as well as opposed to those forces that demean and defeat human potential. Come learn how to create climates intentionally based on trust, respect, optimism, and care while networking with IAIE members around the world.

Co-founders:

William W. Purkey Professor Emeritus University of North Carolina at Greensboro

Betty L. Siegel President Emeritus Kennesaw State University, Georgia

Subscriptions:

The JITP (ISSN-1060-6041) is published once a year, by the International Alliance for Invitational Education®. Subscriptions for non-members are \$50.00 per year; IAIE members receive the journal as part of their membership.

IAIE Postal Address:

The International Alliance for Invitational Education® P. O. Box 594 Nicholasville, KY 40340

Website:

<http://www.invitationaleducation.net>

Permissions:

All materials contained in this publication are the property of the International Alliance for Invitational Education®. The IAIE grants reproduction rights to libraries, researchers, and educators who wish to copy all or part of the contents of this journal, provided no fee for the use or possession of such copies is charged. Authors seeking permissions to use material for commercial purposes should contact the [JITP editor](#).

THE JOURNAL OF INVITATIONAL THEORY AND PRACTICE

A JOURNAL OF THE INTERNATIONAL ALLIANCE OF INVITATIONAL EDUCATION
VOLUME 24, 2018

From the Editor	4
<i>Dr. Chris James Anderson</i> <i>UCAN</i>	
Innovative Collaboration with Digital Stories: Making a Difference through Invitational Education	5
<i>Dr. Debra Coffey,</i> <i>Kennesaw State University</i>	
Inviting Autonomy: Common Roots and Beliefs of Self-determination Theory and Invitational Education Theory.....	17
<i>Dr. Jennifer D. Moss</i> <i>Purdue University</i>	
Psychometric Analysis of the Translated Version of the Inviting School Survey-Revised (ISS-R-2015) and Perceived School Climate in Diverse Tehran Schools.....	29
<i>Maryam Safarzadeh, Dr. Hassan Asadzadeh, Dr. Ali Delavar, Dr. Fariborz Dortaj,</i> <i>and Dr. Noorali Farookhi</i> <i>University of Allameh Tabataba'i, Tehran, Iran</i>	
Secondary Students' Self-Perceptions of School Climate and Subjective Well-Being: Invitational Education Meets Positive Psychology	45
<i>Kathy L. Reid and Dr. Ken Smith,</i> <i>Australian Catholic University</i>	
JITP Guidelines for Author Submissions	70

The Journal of Invitational Theory and Practice

Editor:

Chris James Anderson
UCAN, Manchester NH, USA

Editorial Review Board:

Debra Coffey
Kennesaw State University, Kennesaw GA, USA

Dianne Cullen
Australian Catholic University, Melbourne, Australia

Jenny Edwards
Fielding Graduate University, Evergreen CO, USA

Sheila Gregory
Alpharetta GA, USA

Janet Hamstra
Nova Southeastern University, Fort Lauderdale FL, USA

Barbara Martin
University of Central Missouri, Independence MO, USA

Jude Matyo-Cepero
University of NE- Kearney NE, USA

Sean Schat
Brock University, St. Catharines ON, Canada

Ken Smith
Australian Catholic University, Melbourne, Australia

Trudie Steyn
University of South Africa, Pretoria, South Africa

Strathene Varvisotis
University of NE- Kearney NE, USA

Editorial

The 2018 Journal of Invitational Theory and Practice (JITP) advances the tenets of Invitational Education (IE) theory and practices to optimize educational equity in quality. Despite the dichotomy exhibited by current politics, IE practitioners will ideally find unanimity in the belief that education is the endeavor that strengthens a mind, frees a spirit, and enriches a society. Consumers will find the research and documented practices within the 2018 JITP reinforce how Invitational Education Theory and Practice effectively provides an interdependent framework to empower people, places, policies, programs, and processes (the Five P's) to “address the total culture or ecosystem of almost any organization” ([Purkey and Siegel, 2013](#), p. 104). The result optimizes the “direction and purpose for all Invitational thought and action” (Purkey & Novak, 2016, p 11), creates an opportunity for stakeholders to realize their full potential, and nurtures an intentionally inviting stance.

Effective institutions and programs seek to create a solid foundation formed from research-based leading indicators for success. Matching non-negotiable goals with stakeholder needs will expand rather than limit the availability of research-based and success-proven strategies and interventions. Programs that promote such a clearinghouse of support ensure professional development is available and within reach. Reform requires raising expectations for critical thinking, professionalism, and self-efficacy. IE practitioners understand that monitoring and adjusting these leading indicators of success requires a clear mission, action-based vision, and systemic invitations to promote intentionality, care, optimism, respect, and trust (I-CORT).

The JITP editor welcomes all opportunities to promote the study, application, and research of Invitational Theory and Practice (ITP). You and your colleagues are invited to submit scholarly papers that identify how ITP guides reform, sustains success, or reinforces best practices through research. To promote Invitational Theory and Practice to an international audience, scholarly articles within the JITP come from global sources, educational practitioners, organizational leaders, and multidisciplinary researchers. Prospective authors may email manuscripts to: JITPeditor@invitationaleducation.net Authors must follow [specific guidelines](#) (p.70) when submitting manuscripts for publication consideration,

Sincerely,

Chris James Anderson, Ed.D.

Editor of the 2018 Journal of Invitational Theory and Practice

Innovative Collaboration with Digital Stories: Making a Difference through Invitational Education

Dr. Debra Coffey
Kennesaw State University

Abstract

This study was designed to explore and describe the impact of innovative group collaboration on digital stories in a children's literature course for pre-service teachers. Participants described the highlights of experiences with innovative creation and the ways they collaborated in an intentionally inviting environment while they prepared the digital stories. The results of this study aligned with the overarching goals, elements, and domains of Invitational Theory and Practice.

Keywords: Invitational Education, Invitational Theory and Practice, Children's Literature, Digital stories.

Introduction

Whether by the glow of a campfire or the light of a computer monitor, stories invite us to partake of new adventures. They give us opportunities to create imaginary worlds with our own heroes. Storytelling is a communication tool that goes back to ancient times and inspires new innovations. Stories convey significant aspects of our culture as they entertain and provide insights for effective living.

Digital storytelling brings the cinema into the classroom. Students become cinematographers as they paint visual pictures with multimedia and bring their stories to life. Stories can be used to invite students into a more compelling and innovative learning experience. Our digital natives in our twenty-first century classrooms feel quite comfortable with multi-media, and digital stories give them opportunities to capture ideas and experiences in ways that are significant to them. When they produce digital stories, they gain confidence, make personal statements in creative ways, and experience the satisfaction of accomplishment.

This study focuses on a university children's literature class in which pre-service teachers prepared digital stories in collaborative learning communities. In this university, administrators and faculty members have worked for many years to provide programs and policies to invite students to enjoy higher levels of learning and innovative academic success. The programs and policies of this major university in the Southeast are intentionally designed to align with the overarching goals, elements, and domains of Invitational Theory and Practice (Purkey & Novak, 2016; Shaw & Siegel, 2010; Shaw, Siegel, & Schoenlein, 2013).

Review of the Literature

Invitational schools encourage students to experience innovation and develop leadership skills in student-centered educational environments. Digital stories and various innovative projects give students opportunities to make choices and experience higher levels of learning through engagement and active participation in the learning process. Invitational Education (IE) focuses on the positive aspects of learning and the affective side of the people, places, programs, policies, and processes in education (Purkey & Novak, 2016; Shaw & Siegel, 2010; Shaw, Siegel, & Schoenlein, 2013). This aligns well with digital stories that combine the power of a story, one of the most meaningful educational tools for generations, with technology, one of our main tools for communication.

Digital Stories

A review of the literature demonstrates the remarkable success and the benefits of digital stories. This is an emerging educational tool that is coming to the forefront in many fields (Alexander, 2011; Ohler, 2013; Yearta, Helf, & Harris, 2018). Digital stories were originally promoted by Dana Atchley, who is considered the father of digital stories (Alexander, 2011; Ohler, 2013). When he popularized digital stories on his program *Next Exit*, his audiences were enthralled and realized that they also had stories to share. He traveled across the country sharing digital stories that spanned events over five decades of his life and conducted workshops with Joe Lambert. This led to the Center for Digital Storytelling and Joe Lambert's *Digital Storytelling Cookbook* (2010). The stories created in workshops were typically personal narratives illustrated by a series of photos on video. Most of the literature about digital stories focuses on this approach. There are many definitions of digital stories, and they can take many forms. Basically, digital storytelling is combining multiple modes of technology to tell a story (Castañeda, 2013).

Invitational Education

Purkey and Novak (2016, p. vii) described Invitational Education (IE) as a theory of practice “designed to create and enhance human environments that cordially summon people to realize their potential in all areas of worthwhile human endeavor” (Purkey & Novak, 2016, p. vii). IE “is an imaginative act of hope that explains how human potential can be realized. It identifies and changes the forces that defeat and destroy people” (p. vii). IE recognizes five Domains: People, places, policies, programs, and processes, that comprise “everyone and everything in an organization...(that) will either build or destroy intellectual, social, physical, emotional, and moral potential for stakeholders” (p.vii).

Invitational Theory and Practice

Invitational Theory and Practice (ITP) “is the overarching theory of Invitational Education (IE)” (Shaw, Siegel, & Schoenlein, 2013, p. 30). Invitational Theory and Practice (ITP) “addresses the total culture/environment of an organization to provide a more welcoming, satisfying, and enriching experience for all involved” (p. 34).

Invitational Theory and Practice aligns directly with the comments of pre-service teachers during interviews and focus groups in this study. Throughout this digital story project, the course

instructor and technology coach used the principles of Invitational Education to encourage students to actualize their potential in creative and meaningful ways.

Methodology

This qualitative interview study was designed to determine the impact of creating a digital story project with a group of pre-service teachers in a university emphasizing Invitational Education. Interviews, focus groups, reflections, class activities, and digital stories were the primary means of data collection, and typological data analysis (Hatch, 2002) was used to codify the overarching themes. Pre-service teachers explored quality literature and the components of effective stories by exploring story elements and using story maps and storyboards to create their own stories. Then they designed plans for collaborative stories and captured the results with videos in collaborative learning communities.

Participants

Pre-service teachers who participated in the project shared their experiences and insights during the interviews and focus groups for this study. The course instructor and technology coach provided ongoing support and guidance throughout the project. This project was completed as part of a university course in children's literature, which is part of a degree program to prepare university students to teach children from birth to five years of age. As students were taking this course, they were completing a field experience and taking courses emphasizing the value of play and technology in childhood education.

For clarity throughout our discussion, the degree-seeking pre-service teachers will be referred to as students. The teacher educators who were guiding the students applied the principles of Invitational Education throughout the program and emphasized the importance of providing a nurturing environment for children.

Procedures

During the preparatory stage, students explored quality literature and the components of effective stories by exploring story elements, analyzing quality stories, and using story maps and storyboards to create their own stories. They used these ideas when they created more extensive storyboards for digital stories in collaborative learning communities and captured the results with videos.

The teacher educator designed the digital story project so that students could make their own choices, enjoy the process, and experience success. She gave them a rubric for major expectations and left aspects of the project open-ended. Then students designed their own rubrics for part of the project to show how they would use it in the classroom. This gave the students a sense of freedom and autonomy as they created their own stories. Then they could relax and enjoy the process rather than feeling like they had to just complete a checklist of requirements. Although they were well prepared for the experience, the innovative technology was new to them, and they gained new confidence as they experienced success with the process.

Students designed their stories in the classroom and the Innovation Lab. This was a place where they could extend their vision of what was possible and experiment to become makers of

technology rather than just consumers. As they created digital stories, the students reflected on what they learned after their project to share tips with others.

Data Collection

Interview questions and focus group questions served as the basis for data collection. They were designed to encourage participants to freely express their perceptions and feelings about the experience of creating digital stories in collaborative learning communities. Interviews and focus groups progressed from general “grand tour questions” (Spradley, 2016), such as a description of a typical day to more specific questions about their experiences. Open-ended questions gave participants opportunities to share their feelings in their own words. Focus group questions were designed to corroborate statements from interviews to give participants opportunities to elaborate on certain issues that were emphasized during interviews.

The semi-structured format provided the opportunity to follow leads from statements made by participants (Van Manen, 1990). These follow-up questions elicited rich descriptions and provided a more complete picture of the lived experiences of the participants.

Data Analysis

Hatch’s typological model (2002) provided the framework for data analysis from multiple perspectives (Glesne, 2015; Patton, 2014). Initial categorization of the data into typologies was followed by repeated readings, line-by-line analysis, and color-coding of the data using *Microsoft Word*. This analysis was ongoing and utilized the nine steps for data analysis designed by Hatch (2002). According to Hatch (2002) typological analysis should only be used if the categories for analysis are evident. At the beginning of data analysis, it became evident that the data aligned with the assumptions, five elements, and five domains of Invitational Theory and Practice (Purkey & Novak, 2016).

Regularities and common characteristics in the responses of participants quickly emerged in a review of the data pattern analysis. As these semantic relationships emerged, they revealed patterns that were suggested in the research literature. These semantic relationships served as links in the data set and provided elaborations on these ideas from the literature. During this codifying process, charts listing relevant data helped identify the integrating concepts that ran through this data.

Color-coded *Post-it flags* were used to label the patterns within the typologies as they were recorded in relation to the specific codes for the participants. While recording integrating concepts that ran through all of the data, stars were used to highlight powerful quotes to facilitate the selection of specific data to support generalizations from these patterns. Throughout these steps the typological model designed by Hatch (2002) continued to provide the framework that illuminated the process of data analysis.

Discussion and Findings

The findings of this qualitative study illustrate the ways that the teacher educators intentionally invited students to experience success, prepared the process, and guided the students

throughout the process. These students conducted their project in a university that emphasized the principles of Invitational Education. Teacher educators and colleagues nurtured and cared for them, and this was reflected in their digital stories.

Invitational Education (IE) emphasizes the ways “everyone has the ability and responsibility to function in a personally and professionally inviting manner” (Purkey & Novak, 2016, p. 23). An intentionally inviting level of functioning creates a dependable stance that helps students to feel secure and increases the likelihood that they will consistently accept and act upon the cordial invitation to pursue an inviting educational experience (Purkey & Novak, 2016, p. 24).

Drs. Purkey, Novak, and Siegel have consistently promoted Invitational Theory and Practice as a way of life (Purkey & Siegel, 2003, 2013). As a result, they have made a difference in so many lives. They have emphasized the IE Domains, or powerful ‘5 Ps,’ to promote a warm and inviting atmosphere wherever they go (Purkey & Novak, 2016; Shaw & Siegel, 2010). The arms of a starfish are used in Invitational Education to illustrate these domains. They have used a starfish diagram to illustrate the ways the five Ps of the domains of IE, people, places, policies, programs, and processes, work together to overcome challenges and make a difference in an organization and potentially the world.

This message of overcoming challenges to promoting a positive environment aligns well with “The Starfish Story,” originally written by Loren Eiseley (1978), which has been shared in many versions and touched the hearts of people all over the world. We are familiar with the inspiring story in which a man sees a little boy throwing starfish back into the water. Then he asks the boy what he is doing. The boy tells the man he is saving starfish, so they will not dry out in the sun. Then the man laughs and tells him there is no way he can save so many starfish. After the boy listens politely, he says, “It made a difference to that one.” This story is often shared to demonstrate the difference one caring person can make. Each person can make a huge difference in the world, and that should never be underestimated. The impact of the influence of one person is clearly seen in the lives of the creators of Invitational Theory and Practice.

When everyone in a group truly values each individual, the power and impact of one person is multiplied in amazing ways. Drs. Purkey, Siegel, Novak, and many leaders of Invitational Education remind us of the power of one as well as the impact of collaboration that leads to systemic change and makes life better for so many. They have accomplished so much, yet they have always been quick to give credit to those who collaboratively experienced success with them. As they have honored collaborators, they have often noted “that if you see a turtle on a fencepost, you know it didn’t get there alone” (Purkey & Siegel, 2013, p. xi). As Margaret Mead stated, “a small group of thoughtful, committed citizens can change the world” (Lutkehaus, 2008, p. 261).

In one video illustrating “The Starfish Story,” a young girl is the one saving the starfish. A young man is jogging, asks her about the starfish. Then he also rescues a starfish. If the leaders of Invitational Education experienced this scenario, perhaps they might have led a collaborative effort to rescue starfish. When the starfish were safe and healthy, they might take this process a step further by collaborating with the community to create a better place for the starfish, such as a tidepool, marine preserve, or aquarium, where starfish could thrive rather than just surviving. As leaders, they would potentially create an inviting and beneficial place where starfish would flourish.

The starfish in the diagram for Invitational Education is in a healthy environment which flows naturally and comfortably. Invitational leaders have the responsibility to provide a safe, secure environment where people flourish comfortably. Then the invitation is given. In this scenario, the leader provides a meaningful environment where the learning process is appealing, and students have opportunities to choose paths to optimal learning.

Fretz (2015) noted that “Invitational Education provides educators with a systematic way of communicating positive messages that develop potential as well as identifying and changing those forces that defeat and destroy potential” (p. 28). “This understanding of the depth and breadth of messages is used to develop environments and ways of life that are anchored in attitudes of respect, care, and civility and that encourage the realization of democratic goals” (Purkey & Novak, 1996, p. 4). Thus, when each individual is deeply appreciated while inclusiveness and collaboration are promoted, the entire system is influenced, and learning is maximized.

As they were developing Invitational Theory and Practice (ITP), Drs. Purkey, Siegel, and Novak spoke from their hearts and shared their life goals for the benefit of educators and students. For instance, as a university president for 25 years, Dr. Betty Siegel consistently worked to make the university a collaborative welcoming environment (Purkey & Siegel, 2003, 2013). She touched the lives of students so profoundly that a group of them sang in her honor during the commencement ceremony, and she was honored in many ways. As president, she promoted the principles of Invitational Education through university programs and policies, consistently touching the lives of students, faculty, and friends in meaningful ways. The campus is filled with concentric circles showing the impact of her inclusive policies of Invitational Education, and her legacy reverberates most profoundly in the Dr. Betty Siegel Fitness Center.

The students in this study were collaborating in a classroom that was impacted by the emphasis on Invitational Education promoted by the presidency and ongoing influence of Dr. Betty Seigel. “ITP focuses on increasing the authentically personal and professional verbal and non-verbal messages that seek to bring forth the best of human potential through care, trust, respect, optimism, and intentionality” (p. 34). Analyzing and improving each of the five Domains of IE: People, places, policies, programs, and processes, “within a framework of the five elements of IE: Intentionality, care, optimism, respect, and trust (I-CORT), systemically transforms the whole school (Purkey & Novak, 2016, p. 22). The results of the study aligned with the domains and elements of Invitational Theory and Practice as these teacher educators collaborated to ensure students’ comfort, appropriate challenges, and success with the project.

Results of the Study

This section describes specific ways in which students’ experiences in collaborative learning communities at a major university in the Southeast aligned with the overarching assumptions, elements, and domains of Invitational Theory and Practice (Purkey, & Novak. 2016; Shaw & Siegel, 2010; Shaw, Siegel, & Schoenlein, 2013). These results reflect patterns identified across the study’s interviews and focus group sessions. The interviews and focus groups of this study consistently demonstrated the ways students designed digital stories that reflected their experiences in a welcoming, supportive environment. Invitational Theory and Practice “focuses on increasing the authentically personal and professional verbal and non-verbal messages that seek to bring forth the best of human potential through, trust, respect, optimism, care, and intentionality”

(Shaw, Siegel, and Schoenlein, 2013, p. 34). Throughout the interviews of this study there were many links between these elements of Invitational Education and the comments made by students as they discussed their collaborative digital story project.

Overarching Goals of Invitational Education

Implementation of Invitational Theory and Practice authentically creates and sustains welcoming learning environments. The systemic framework promotes intentionality, care, optimism, respect, and trust (I-CORT). The goal is to promote “increased learning outcomes and personal growth” (Shaw, Siegel, & Schoenlein, 2013, p. 33).

It was highly evident that these goals aligned with the approach of the faculty member and technology coach who orchestrated this project. They collaborated carefully and consistently to guide and encourage students as they completed their digital stories in the framework of the program. They regularly shared innovations to enhance success as they opened opportunities within and beyond the classroom.

The results of this study demonstrated the impact of digital stories that combine the power of a story with technology as well as the alignment between experiences of students in collaborative learning communities and the five Domains and 5 elements of IE. The elements of Invitational Education intensify the power and significance of each domain (Shaw, Siegel, & Schoenlein, 2013). The next section will highlight results of the study and discuss the impact of alignment with Invitational Theory and Practice.

Intentionality

“Intentionality is the keyword of Invitational Theory” (Haigh, 2011, p. 300). Invitational environments are both created and sustained by intentionality. As a process for defining school climate, Invitational Education encourages a Democratic Ethos to feature “collaborative and cooperative procedures and continuous networking stakeholders” (Purkey & Novak, 2016, p. 22). Intentionality in the design of these processes emphasizes the value and boundless potential of each individual (Novak, Rocca, & DiBiase, 2006).

Systemic processes intentionally reflect care, optimism, respect, and trust (I-CORT) to actualize the fullest potential of a collaborative atmosphere. These intentional processes encourage ongoing development of cooperative procedures with reciprocal benefits.

The teacher educator worked intentionally with the technology coach to provide relevant and meaningful experiences within the students’ comfort zone, thereby promoting success without undue stress (Vygotsky, 1978). It was evident that this goal was achieved when a student stated, “This experience helped bring a story to life, and we used our creativity to create a cultural story and have fun at the same time.”

Another student said, “One thing that surprised me while doing this was how much I enjoyed the process of it. Throughout the project we were able to laugh and enjoy what we were doing.”

Care

Invitational Education focuses on people and the importance of each individual for a successful educational experience (Purkey & Novak, 2016). Students chose a country to emphasize at the beginning of the project, and they began conducting research after the country was chosen. They were careful to make their stories authentic as they connected with Kenyan tribes, Mexican villagers, and various cultural lifestyles. The education program is designed to

help students maximize their cultural awareness and connect with cultures around the world in meaningful ways. At the end of the project, students said they were more aware of the importance of cultural connections and books that promote cultural insights in the classroom library. This project was conducted in a university that emphasized an inclusive, caring environment, and the students created stories that reflected this nurturing environment. A student described one of the stories:

This story promotes cultural awareness by teaching children about Kenyan culture and diversity. The story is about a little boy who imagines himself in a Kenyan safari and finds a baby elephant who lost his herd. Throughout the story the boy and the baby elephant work with different safari animals (a giraffe, a lion, a cheetah and a rhino). They come together and use their strengths to find the baby elephant's herd.

Another collaborative learning community created a story about a man who loved shiny gold coins. At the beginning of the story he was asked to share his coins with villagers. Then he a tragedy which damaged his home led to a change of heart, and he was glad to share his gold coins. The Mexican villagers were thrilled, and the man learned the value of sharing.

Optimism

The optimism of each individual helps to make a school inviting as it encourages everyone involved. Programs that embrace Invitational Education Theory and Practice can be “formal or informal, curricular, or extra-curricular. It is important for educators to ensure that all of the school's programs work for the benefit of everyone and that they encourage active engagement with significant content” (Purkey & Novak, 2016, p. 21).

Optimism and enthusiasm were highly evident during this project. The teacher educators and students in the children's literature class consistently conveyed an optimistic perspective. When students discussed plans and chose roles for the digital story project in their collaborative learning communities, they considered the assets of each student and promoted the development of those assets using creativity and attention to details.

As a teacher educator taught the course on children's literature, she provided scaffolding to promote confidence and optimism when they began the digital story project. After analyzing quality literature, creating storyboards with ideas for their own stories, and discussing possibilities collaboratively, they gained more confidence. ‘A student in a group using a chroma key screen and apps to create a digital story noted, “A highlight of this experience for me was after we finished our first scene and realized that we could do this, and it could be great. After that scene, each scene after came easier.”

A student in a group that designed a small theater with shadow puppets summarized the process: “To make the digital story we did a story map, worked together, and filmed what we had done to showcase our story.”

Respect

Invitational Education emphasizes the importance of documenting policies and emphasizing consistency for the benefit of everyone in the program. Purkey and Novak (2016) described policies as “critical semantic webs that influence the deep-seated structure of any school” (p. 21). Students in the children's literature class were collaborating in a university in

which those “critical semantic webs” reflected the structure of a respectful environment in which their ideas were honored and appreciated by their colleagues and teacher educators. Policies and procedures were intentionally designed to promote respect, and meaningful collaboration was valued for promotion and tenure. A student in the children’s literature class noted, “I began this class saying that the creativity gene was given to my other siblings, but this exercise helped me to see that I do have creative ideas to offer. After she discussed benefits of the experience she exclaimed, “I AM PUBLISHED with some of the most amazing writers and illustrators in the world!!!”

Trust

Invitational Education highlights the importance of providing a pleasant, comfortable, and aesthetic learning environment which nurtures growth and promotes trust (Purkey & Novak, 2016). When leaders establish trustworthy patterns of interaction, schools augment the benefits of this pleasant environment. Reliability, genuineness, truthfulness, competence, and knowledge are keys for establishing this type of environment (Arceneaux, 1994; Purkey & Novak, 2016). The teacher educators worked from the beginning to establish trust and a pleasant rapport with students. The university itself is a safe, pleasant, and caring environment in which students feel comfortable. The education program is an extension of that atmosphere of trust, extending the basic needs for a safe and caring environment (Maslow, 1943) to the next level.

A student emphasized “the importance of trusting your team.” She stated, “This project is too big to tackle alone, and if you cannot trust the people you are working with, you are going to be overwhelmed and do more work than needed.” She was glad she could trust her team and work with them effectively for maximum success.

Another student shared, “What surprised me was how much I really enjoyed being in this group. Our members are in several classes together and are in other groups, but like one group members says, ‘We have created an atmosphere of trust and togetherness!’”

Overarching Comments

Students consistently said they would use digital stories with their own classes. They were quite pleased with their accomplishments. When they were asked about sharing their digital stories right after they completed them, they immediately said, “Oh yes, we want everyone to know what we have done. We want to be famous.”

Students noted that this project made them want to be more creative in their own classrooms. As they summarized the experience, students commented:

- “This project influenced me by opening my eyes to the power of technology in the classroom.”
- “This experience impacts my future career by giving me insight into how children can create their own stories using technology.”
- “I didn't know much about shadow puppets before we started, and now I am confident that I could do many more shadow puppet projects for my future classroom.”

A student commented, “I will never look at a book or consider the story on the pages as just a story in a book ever again. There is something about doing something that changes your

perspective about it. When I moved to doing the next assignment (an annotated bibliography), I could imagine the character moving around on a green screen. I would, and have, recommended it to several early childhood educators as I think it would truly revolutionize their literary perspective.”

Conclusion

When students gain confidence with digital stories, they develop leadership skills and feel like they have an opportunity to make a difference in the world. As teachers invite their students to share digital stories, a multiplication effect may result as they share digital stories in their own classrooms and give their students opportunities to generate their own digital stories.

As students say, “Lights, camera, action. . . .” “they enter the world of cinematography and create new memoirs of successful achievement in the classroom. These experiences inspire creativity and highlight the importance of culturally responsive literature. Thus, pre-service teachers discover new ways to make a difference and help their future students to gain confidence with creative achievement. This transformative experience could continue to multiply the impact and prepare them to make a difference in the academic achievement and creative potential of future students.

References

- Alexander, B. (2011). *The new digital storytelling: Creating narratives with new media*. Santa Barbara, CA: Praeger.
- Arceneaux, C. J. (1994). Trust: An exploration of its nature and significance. *Journal of Invitational Theory & Practice*, 3, 5-49.
- Castañeda, M. E. (2013). “I am proud that I did it and it’s a piece of me:” Digital storytelling in the foreign language classroom. *CALICO Journal*, 30(1), 44-62.
- Eiseley, L. (1978). *The star thrower*. New York, NY: Times Books.
- Glesne, C. (2015). *Becoming qualitative researchers: An introduction*. New York, NY: Pearson.
- Fretz, J. R. (2015). Creating optimal learning environments through Invitational Education: An alternative to control-oriented school reform. *Journal of Invitational Theory & Practice*, 21, 23–30.
- Haigh, M. (2011). Invitational Education: Theory, research and practice. *Journal of Geography in Higher Education*, 35(2), 299–309.
<https://doi.org/10.1080/03098265.2011.554115>
- Lambert, J. (2010). *Digital storytelling cookbook*. Berkeley, CA: Center for Digital Storytelling.

- Lutkehaus, N.C. (2008). *Margaret Mead: The Making of an American Icon* (Princeton, NJ: Princeton University Press, p. 261.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370.
- McKnight, C. P., & Martin, B. N. (2015). Creating an effective educational environment for adult learners: A qualitative, multi-case study of off-campus Center Administrator's use of Invitational Leadership. *Journal of Invitational Theory & Practice*, 21, 48–67.
- Novak, J., Rocca, W., & DiBiase, A. (Eds.). (2006). *Creating inviting schools*. San Francisco, CA: Caddo Gap Press.
- Ohler, J. (2013). *Digital storytelling in the classroom: New media pathways to literacy, learning, and creativity* (2nd ed.). Thousand Oaks, CA: Corwin.
- Patton, M. Q. (2014). *Qualitative research & evaluation methods: Integrating theory and practice*. Los Angeles, CA: SAGE Publications.
- Purkey, W., & Novak, J. (1996). *Inviting school success* (3rd ed.). Belmont, CA: Wadsworth Publishing.
- Purkey, W. W., & Novak, J.M. (2016). *Fundamentals of invitational education* (2nd ed.). The International Alliance for Invitational Education. Retrieved from <https://www.invitationaleducation.net/product-category/books/>
- Purkey, W. W., & Siegel, B. L. (2003). *Becoming an invitational leader: A new approach to professional and personal success*. Atlanta, GA: Humanics Trade Group.
- Purkey, W. W., & Siegel, B. L. (2013). *Becoming an invitational leader: A new approach to professional and personal success* (2nd ed.). West Palm Beach, FL: Humanix Books.
- Shaw, D. E., & Siegel, B. L. (2010). Re-adjusting the kaleidoscope: The basic tenants of Invitational Theory and Practice. *Journal of Invitational Theory & Practice*, 16, 105-112.
- Shaw, D. E., Siegel, B. L., & Schoenlein, A. (2013). The basic tenets of Invitational Theory and Practice: An Invitational glossary. *Journal of Invitational Theory & Practice*, 19, 30-42.
- Spradley, J. P. (2016). *The ethnographic interview*. Long Grove, IL: Waveland Press.
- Stodden, R. Whelley, T., Chang, C., & Harding, T. (2001). Current status of educational support provision to students with disabilities in postsecondary education. *Journal of Vocational Rehabilitation*, 16(3/4), 189-198.
- Van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy* (2nd ed.). Albany, NY: State University of New York Press.

Vygotsky, L.S. (1978). *Mind in society*: The development of higher psychological processes. Cambridge, MA: Harvard University Press.

Yearta, L., Helf, S. & Harris, L. (2018). Stories matter: Sharing our voices with digital storytelling. *Texas Journal of Literacy Education*, 6(1), 14-22.

To contact the author:

Dr. Debra Coffey, Associate Professor
Department of Elementary and Early Childhood Education
Bagwell College of Education
Kennesaw State University
dcoffey1@kennesaw.edu

Inviting Autonomy: Common Roots and Beliefs of Self-determination Theory and Invitational Education Theory

Dr. Jennifer D. Moss
Purdue University

Abstract

Often, educational and psychological theories stand independently of one another, focusing on particular, discreet components of learning or motivation. However, there are many similarities between invitational educational theory, which examines motivation and education, and self-determination theory, a theory of motivation and personality. Both theories, when applied to educational settings, value respectful relationships between teachers and students. They encourage practitioners to incorporate choice into their plans and recognize the importance of a person's perception to that person's related behavior. Invitational education theory and self-determination theory were developed separately by different researchers. However, the two theories emerged during the early 1970s, at a time when educators and psychologists were rejecting behaviorism and, instead, beginning to value a human-centered approach. This paper aims to introduce invitational education and self-determination theory, describe their origins from a similar place and time via humanistic psychology, and highlight key similarities in their beliefs with the ultimate goal of enhancing knowledge in order to continue to improve classrooms world-wide.

Keywords: Invitational Education theory, Self-determination theory, Humanism

Introduction

When a teacher issues an invitation to a lesson, she has made a choice to ask a selected group of students to join her. The teacher understands that some students may accept her invitation, others may decline, and the students' choices are to be respected. This basic idea from invitational education theory (IE; Purkey & Novak, 2016), that teachers can manage their classrooms and educate their students with dignity and empathy rather than threats and punishment, aligns with self-determination theory (SDT; Ryan & Deci, 2000b), which says humans have basic psychological needs for autonomy, relatedness, and competence. In fact, in addition to this initial sense of alignment, these two theories have a great deal more in common.

This paper explores the common roots of SDT and IE grounded in humanistic psychology and education, as well as the similar beliefs that both theories hold. After describing both theories, my first goal is to demonstrate how the two theories grew from a common place and time. Both IE and SDT were formulated during a time when psychology had moved from behaviorism to humanism and viewing the theories through this lens allows for a complete understanding of their initial contexts. My second goal is to highlight three key beliefs common to both IE and SDT: the need for autonomy, the importance of positive relationships and the value of perceptions.

The scope of invitational education is broad. When considering whether a school as a whole is an inviting place, the style of the administrators, the set-up of the classroom, and the teaching styles of the instructors are all examined (Purkey & Novak, 2016). Other educational theories are considerably narrower than IE, focusing on select parts of the educational process. Achievement goal theory (Pintrich, 2000) focuses on students' reasons for undertaking classroom tasks, such as to learn or to show what they already know. Expectancy-value theory (Wigfield & Eccles, 2000) describes how students act based on what they think they will gain or achieve from the task.

However, when seeking theories that are as broad as IE, SDT is a likely partner for comparison. It addresses behaviors and beliefs at the teacher/student level (Reeve, Jang, Carrell, Jeon, & Barch, 2004) all the way to school district concerns of the negative impacts of high-stakes testing (Ryan & Brown, 2005). SDT is theory of motivation and personality and has been studied extensively in schools, as well as in many other domains such as business, physical education and sports, health and wellness, and parenting (Ryan & Deci, 2017).

In order to provide the basis for further discussion about IE and SDT, some background information is necessary. These overviews should not be taken as comprehensive texts explicating all aspects of the theories, but as introductions to establish the common points that will be discussed later. Both IE and SDT have robust literatures that provide detailed explanations of their theories and applications (SDT: e.g., Deci & Ryan, 1985; Ryan & Deci, 2002; Vansteenkiste, Lens, & Deci, 2006) (IE: e.g., Purkey & Aspy, 2003; Zeeman, 2006).

Self-Determination Theory

Self-determination theory (Ryan & Deci, 2000b) is a comprehensive theory of motivation and personality, focused on nurturing inner motivational resources to enhance optimal functioning. A key component of SDT is the recognition of the three basic psychological needs: autonomy, relatedness, and competence. Autonomy refers to the perception that one's actions are volitional in nature, chosen by the self rather than directed by another. Relatedness encompasses the sense that one is liked, appreciated, and valued in a particular setting. Competence is perceived when one feels that they are successful in their tasks and their interactions (Ryan & Deci, 2017). According to SDT, educators are more successful when they support these basic psychological needs for their students (Reeve, 2002).

SDT also describes a person-environment dialectic, where what a person does affects her environment and in turn, the environment affects the person in a continuous cycle (Deci & Ryan, 2002). This two-part relationship shows that people have agency over their situations; they can act upon their surroundings and make changes. The environment is then changed, but it continues to act upon people in ways that create change in them as well. SDT believes that human beings are active agents, striving for continued growth and integration (Ryan & Deci, 2017).

A third component of SDT is the motivational spectrum. Often, when discussing motivation, other researchers and educators will view it as an all-or-nothing construct: James has motivation, but Stacey has none. However, SDT proposes that there is a spectrum of motivation from amotivation (literally, without motivation) through externally motivated behaviors, to intrinsic motivation (Deci & Ryan, 2002). This presents a more fine-grained analysis, showing that while a very few people are without motivation, most people are motivated in positive or negative ways. There are four ways of being extrinsically motivated. When people are motivated by rewards, money, or the specific outcome of the task, SDT describes this as external regulation.

This happens when we work just for the money, or train kids to complete tasks just for the stickers. With a slightly more internal focus, the next type of motivation is introjected regulation, where behavior is regulated by fears of guilt, shame, or a sense that one “has to do” the task to avoid an unpleasant outcome. Whenever we use the word “should” with ourselves or others, we are likely introducing introjected regulation.

Still considered extrinsic motivation but demonstrating more positive outcomes are identified regulation and integrated regulation (Ryan & Deci, 2000a). Identified regulation happens when a person takes on a task because he knows it is valuable and he can identify the importance. Integrated regulation describes times when a person engages in an activity because it represents who he thinks he is as a person. For example, if two students were assigned to read a chapter in a science textbook, an “identified” student might read because he understands the importance of learning the material in the chapter for his future work in class. A student displaying integrated regulation might read the same chapter because he feels that learning and doing his homework are parts of who he is, as a person. Mainly, it is important to understand that these two types of regulation represent the positive end of the spectrum of extrinsic motivation.

Beyond the different types of extrinsic motivation, at the most positive end of the motivation spectrum, lies intrinsic motivation. Intrinsically motivated behavior originates when a person volitionally undertakes a task because she finds it inherently satisfying and enjoyable (Ryan & Deci, 2000a). For example, a student may become engrossed in project identifying cloud formations because she chose the topic and finds it to be fun and enjoyable.

While there are times when intrinsic motivation is visible in educational settings, teachers often need to encourage students to complete tasks that they have not chosen and may not find enjoyable or satisfying. In these cases, SDT proponents would suggest that teachers return to the key component first discussed in the SDT section: autonomy. Teachers can support students’ autonomy in the classroom, even for less preferred tasks, by enacting several strategies including providing a satisfying rationale for the activity, incorporating elements of choice, and promoting the value of the activity (Reeve, 2002).

These autonomy-supportive strategies stand in contrast to controlling teaching strategies (Reeve, 2002). When teachers control children, or when anyone seeks to control others, they try to control their thoughts and behaviors. Controlling teachers manage their classrooms with threats of punishment and sarcasm. Other controlling behaviors include shaming children, issuing commands, talking more than listening, and not allowing students to hold educational materials (Reeve, 2000).

Invitational Education Theory

Invitational education theory (IE) provides educators and researchers with a framework to guide teacher and administrator behaviors in school settings (Purkey & Novak, 2016). IE rests on three foundations: the democratic ethos, the perceptual tradition, and self-concept theory. The democratic ethos reminds educators that all students matter and that people grow by making their own decisions. The perceptual tradition suggests that everyone acts in accordance to the perceptions that they hold. Self-concept theory states that people have a sense of who they are, a self-concept which encompasses what they believe about themselves and their place in the world.

These three foundations are supported by five assumptions (Purkey & Novak, 2016). First, IE posits that people are capable, worthy, and responsible, and should be treated as such. Second, they point out that education is a cooperative undertaking. The third assumption focuses attention

on the fact that the process used along the way becomes the product in the end. Assumption four indicates that all people, students and adults alike, have limitless potential, and assumption five follows this up by indicating that people can reach this potential in environments that are intentionally inviting. The core values of these five assumptions from IE suggest that people are important and competent, that they possess the potential for growth, and that growth is fostered in collaborative environments that are designed intentionally for growth. Teachers in these classrooms express might have furniture sized for the students, create activities that allow for mistakes but promote learning, and demonstrate warm regard for their students by learning about their families.

Along with the foundations and supporting assumptions, IE posits five basic elements that describe how to enact an inviting style: intentionality, care, optimism, respect, and trust (Purkey & Novak, 2016). These five elements characterize IE as a teaching style that is enacted purposefully and predictably which builds trust and reliability. It is also a style that encourages growth of all parties involved, autonomous functioning, and the value in expending effort to achieve a worthwhile goal.

Points of Similarity between IE and SDT: Common Roots in Humanism

There are several ways that IE and SDT are similar, including calls for treating people with respect and honoring their potential for growth. The similarities are not surprising when one considers how both theories emerged at a time when psychology and education researchers were endorsing humanistic views of behavior and rejecting the behaviorism which had previously dominated both fields.

Both IE and SDT emerged during the early 1970s (Deci, 1971; Purkey, 1970). To better understand this context, it is vital to reflect on key points in education and psychology in the United States leading up to this time. As the previous century began, during the 1900s, behaviorism was a rising philosophy in education and psychology. Behaviorism is a theory that asserts people can be controlled by the rewards and punishments that are provided by their environment (Schwartz & Lacey, 1982). Pavlov published his research on classical conditioning in 1906 (Abrahmson, 2004). This was followed by Watson and colleagues founding the school of behaviorism in 1920 ("Timeline: The development of psychology,") and Skinner's publication of his first paper on conditioning in 1930 (Abrahmson, 2004). By the 1950s, behaviorism had found its way into education, with Skinner's proposal of teaching machines, apparatuses that deliver lessons and provide positive or negative feedback to students (Skinner, 1958). Skinner described these machines as a way to optimize educating one's self.

While behaviorism was taking center stage in education and psychology during much of this time, a more humanistic, person- or student-centered line of inquiry and research was materializing. Dewey began a movement of progressive education with works published as early as 1904. He sought to democratize education for all students (Dewey, 1975). Mathematics educators in the 1920s began to wonder about the value of teaching topics that weren't inherently valuable to basic, everyday life (Klein, 2003). In 1936, Piaget published *Origins of Intelligence in the Child*, which put forth his theories of how children are not mere vessels to be filled with knowledge but that children construct knowledge for themselves as they learn. The 1940s saw a rise of humanism in psychology with seminal publications by Rogers and Maslow (Maslow, 1943; Rogers & Carmichael, 1942).

Humanistic psychologists began to organize in the late 1950s (Moustakas, 1986), with the development of a journal, edited books, and a conference. During the 1960s psychologists and educators shifted away from behaviorism (Buhler, 1971). Rogers's 1961 work, *On Becoming a Person*, explained that effective psychotherapy should be grounded in a relationship between the patient and the therapist, instead of a behaviorist-focused, one-way delivery model where the therapist fixes the patient. Bruner's 1966 work, *Toward a Theory of Instruction*, helped continue this move away from behaviorism and toward cognitive approaches in education.

It is against this backdrop that SDT and IE emerged in the late 1960s and early 1970s. Purkey published on self-concept and academic achievement in 1967 and 1970. His early work focused on the relationship between self-esteem and students' school achievement, along with the way that humans develop in an environment that provides social interactions (Purkey, 1970). By addressing self-esteem and achievement, he incorporated the humanistic idea of cognition rather than relying on the behaviorist notion that people merely react to their environment, as Skinner's theories on condition proposed (Abrahamson, 2004). Considering the value that humanists place on relationships, Purkey (1967) cited humanists, including Rogers, as he discussed how the self was a social product, based on one's own perceptions, and growing from one's interactions with the environment. Beginning in 1968, Purkey and Siegel were also training teachers in methods to humanize education, sharing with them much of what would become IE (Purkey, 2016).

As noted in Table 1 (p. 23), SDT was not named as a theory until Deci and Ryan's 1985 book, *Intrinsic Motivation and Self-Determination in Human Behavior*, but Deci began publishing the ideas that would ultimately be part of the foundation as early as 1971. Soon after, Deci introduced cognitive evaluation theory, now included as a mini-theory of SDT, which suggests that social contexts impact one's intrinsic motivation. It posits that people evaluate messages they receive, rather merely act upon them and that the relationship is an important part of whether a person would be intrinsically motivated to act. Further addressing intrinsic motivation, Deci placed his work in direct contrast to the behaviorists as he explained that money and rewards decrease intrinsic motivation. At the time, behaviorists believed that if a task provided a positive reward then a person would keep doing the task, regardless of the person's context (Deci, 1972). Deci pointed out that the effectiveness of this motivational tactic depended on entirely external motivators and ignored internal motivators. Deci discussed how the behaviorists were only satisfying Maslow's lower order needs for money and tangible rewards, while neglecting higher order needs such as self-esteem and self-actualization.

Table 1
IE and SDT roots in humanism

	Timing	Rejection of behaviorism	Person-centered beliefs
Humanism	Humanist theories began being put forth as early as 1904 (Dewey) and continued through the first half of the 20 th Century (Piaget, 1936; Maslow, 1943). Humanistic psychologists organized in 1950s	Support of cognitive approaches to education instead of motivating by rewards and punishments (Bruner, 1966) Topics in education should be inherently meaningful to students (Klein, 2003)	Importance of relationship between people (Rogers, 1967) Children construct information, are not empty vessels (Piaget, 1936)
Invitational Education Theory	Purkey published <i>The Self and Academic Achievement</i> , 1967	People are always motivated, operating from their beliefs at the time, not only from rewards and punishments (Purkey & Aspy, 2003)	The self is a social product, in relationship with others (Purkey, 1967)
Self-determination Theory	Deci published in 1971 on how rewards undermine intrinsic motivation	Rewarding people for doing tasks undermines their intrinsic motivation (Deci, Sheinman, Wheeler, & Hart, 1980)	Learning is enhanced when teachers respect students and provide supportive classrooms (Deci, Sheinman, Wheeler, & Hart, 1980)

Authors and researchers over time have maintained the ties between humanism and the two theories, IE and SDT. In 2003, Purkey and Aspy wrote about how IE typified humanistic psychology in practice, as it is a theory that encourages fulfillment of human potential. In this particular instance, Purkey and Aspy described how low-performing schools were transformed from failing schools managed with “law-enforcement techniques” (p. 2) such as metal detectors and security cameras, to a welcoming and inviting environment where students scored high on standardized achievement measures. Novak (1981) explained that the name for IE came about as an alternative to “humanistic education,” a term that he felt had become overused. Researchers in SDT have published articles in the *Journal of Humanistic Psychology*, including Sheldon and Kasser’s 2001 paper about well-being, goal concordance, and support for humanistic theories.

Points of Similarity between IE and SDT: Common Beliefs

From their common roots, there are three key beliefs that SDT and IE share. Both theories value teacher autonomy support and promote relatedness between students and teachers. In addition, they both recognize how a person's perception is the basis for his behavior.

Autonomy

According to SDT, autonomy is feeling volitional and choiceful in your actions (Ryan & Deci, 2002). For example, did the student complete the task because she wanted to? Or did she complete the task because she was trying to achieve a reward or avoid an unpleasant consequence? Was her behavior motivated from within, or was she compelled by outside forces? Autonomy (along with relatedness and competence) is seen as a basic psychological need in SDT, as previously mentioned. It is necessary for the basic functioning of human beings, just as air and water are vital physiological needs (Ryan & Deci, 2000b).

Autonomy is not necessarily synonymous with independence, nor is it the opposite of dependence, according to SDT (Ryan & Deci, 2002). Following directions can be done autonomously if one endorses the behavior requested. For example, when a teacher introduces an assignment to her students, she may need to give them very strict guidelines as the assignment is part of a larger project that will build off of this assignment. If the teacher helps her students understand the need for the strict guidelines it is more likely that the students will follow them autonomously. It is also entirely possible to work independently and feel pressured into doing so. A teacher might create a project where students can work in pairs, but she might pressure a few high-achieving students to work alone so they can challenge themselves. These students will likely agree to work independently, but not with autonomy.

When teachers attend to their students need for autonomy, SDT refers to this as autonomy support (Reeve, 2002). Teachers who support their students' need for autonomy do the following: listen to their students, allow students to complete tasks in their own ways, help students draw upon their own internal motivation, provide information about and reasons for tasks, demonstrate the value of the tasks, and understand and accept when students express negative emotions (Reeve, 2014). For example, teachers supporting their students' autonomy might allow them to choose their own topics for a presentation as well as their own way of presenting the material, rather than ask every student to report on the same book in the same way. They might also listen to their students' complaints about a third day of indoor recess due to frigid temperatures, rather than punish them for loud whining.

While using different language, IE also values autonomy and autonomy support, describing a "dynamic and ethical" way of "doing-with" other people rather than "doing-to" others (Purkey & Novak, 2016, p. 8). When teachers are doing things to other people, they are controlling them – the opposite of autonomy support. We can see when teachers describe what they do, including making students take tests, getting them to line up, and giving them homework. Teachers that are doing with their students might say instead that they are working on algebra problems together, finding out what their students know, and helping them get ready for lunch.

The democratic ethos that IE proposes is another form of autonomy support, reminding educators that it is important to allow people to express their needs on issues that impact their lives (Purkey & Novak, 2016). Brinson and Miller (1995) echo this in saying that students should be invited to be part of the educational processes that will affect them. For example, high school history students might be invited to decide if they want to organize a field trip to a local historical

site or invite a guest speaker to their class. Fourth grade students might be asked to vote on whether they have their weekly spelling tests before or after lunch.

In autonomy supportive teaching, the idea is to encourage the students to find their inner motivation resources to complete the task because research indicates that students who are controlled do poorly compared to students who act autonomously (Reeve, 2002). IE also believes that motivation is a force that is internal to each person, rather than something that can be bought with stickers, rewards, and other reinforcements (Purkey & Novak, 2016). In IE, how we do something matters – trying to achieve good outcomes through bad means is considered ineffective.

Relatedness between Teachers and Students

Both theories value building strong, positive relationships between teachers and students. In SDT, this is referred to as relatedness, one of the three basic psychological needs that were previously discussed (Deci & Ryan, 2002). We have a need for relatedness and relationships that we have either fulfill this need or thwart it. Ideally, relationships between teachers and students should fulfill the students' needs for relatedness, as well as the teachers' needs. In IE, this need for positive relationships is best explained by care, one of the five basic elements. Purkey and Novak (2016) describe caring teachers as having empathy, warmth, and positive regard for their students and themselves. Linking the theories, as teachers develop positive relationships with their students, the caring that they exhibit satisfies the students' relatedness needs. Beyond the classroom, as caring collegial relationships develop at school, teachers satisfy their own needs for relatedness and those of their fellow teachers as well.

In order to build positive relationships, IE suggests that teachers should be personally inviting with others, which is one of the steps in the Four Corner Press of being personally and professionally inviting with one's self and others (Purkey & Novak, 2016). In order for students to feel that they belong in the classroom community, teachers can learn about students' families and outside interests, they can share information about themselves and their activities away from school, and celebrate classroom success with their students. This focus on being personally inviting maps onto SDT, which identifies that relatedness-building actions on the part of the teacher also created a more autonomy-supportive classroom environment (Reeve, 2002). These actions include listening, answering student-generated questions, taking students' perspectives.

Students in classrooms with higher levels of relatedness also are more likely to internalize the teacher's values and find more identified regulation for learning (Niemic & Ryan, 2009). Student satisfaction with the class also increases when positive relationships are valued (Amos, in Purkey and Stanley, 1991). Lacking a positive relationship with teachers may even detract from students' school experiences, leading to decreased engagement and enjoyment and higher levels of school-related anxiety (Klassen, Perry, & Frenzel, 2012).

Perception

Both SDT and IE believe that people's actions are based on their perceptions of their contexts. When a student believes that a teacher is insincere in his invitation to learn a new multiplication skill, he may respond with negativity. When a student perceives that a book report assignment is too difficult, she may withdraw from the assignment because her need for competence has been thwarted. In either case, the invitation might have been sincere and the assignment might have been well within the student's abilities, but the perceptions are what drive the behaviors.

There are many ways that SDT addresses perception. Cognitive evaluation theory, a mini-theory of SDT, suggests that a person's perceived sense of control and competence will determine how intrinsically motivated she is for a task (Ryan & Deci, 2002; Vallerand & Ratelle, 2002). Positive effects of a higher perceived sense of control include better performance, increased well-being, less aversion of unpleasant situations, and reduced sense of helplessness. In addition, when a person receives payment for a task that was already interesting, the level of intrinsic motivation decreases suggesting that the perception of the task has changed from interesting to something that is only done for money (Vallerand & Ratelle, 2002)

The perception of how much control one has over one's behavior has positive effects including enhanced performance and well-being, decreased aversion for unpleasant circumstances, and decreased helplessness, via many research studies. In describing what determines a person's motivation for an event or task, Vallerand and Ratelle (2002) talk about how it is determined by the how well the context advances a person's perception of autonomy, relatedness, and competence. If a student believes that he has no control over his performance on a group project because other students have taken charge, his positive motivation will decrease. Her teacher may disagree and say that he does have control over his performance, but the student himself perceives that he has none, and it is that perception which will determine his motivation and, ultimately, his performance. It is impossible to functionally measure a person's sense of autonomy, competence, and relatedness. Instead, we rely on the person's perception of how well those needs are filled. As it is said so often, perception is reality.

Invitational education echoes these sentiments with their foundational statements about the perceptual tradition and self-concept (Purkey & Novak, 2016). The behavior that we see from other people is a function of how they perceive the world around them, and at bottom, how they perceive themselves. People strive to preserve and augment their perceived self. In addition, IE also sees perceptions in the interpretation of any invitation that has been issued. A teacher may issue an invitation to a student to join a lunchtime book group, but the student may not perceive the invitation as sincere if he feels that the teacher only wants him to go because his language arts grades are slipping. However, Purkey and Novak (2016) point out that to students who have not had experience with being invited, even a small invitation will be perceived positively.

Novak (1981) points out that perception should also be considered when issuing invitations. A teacher might consider his approach to be inviting, but the students may not perceive it that way. He points out that a message is inviting if it "affirms a person's value, ability, or responsibility," (p. 5) but that the recipient then has the job of decoding the message, and will ascribe perceived intent. A student may not perceive an invitation the same way that a teacher or observer intended, and since in schools most of the time the student is on the receiving end of invitations, it is the student who decides whether the message was inviting or not.

Linking both of the theories, SDT and IE allow that, for each person, his perception is his reality. Students who are intrinsically motivated to read may lose interest when they are provided with an opportunity to earn incentives for each book completed. Framing this incentive program as an invitation, the teacher may have meant only to reward the high performing students. However, students create their own perception of the situation which in this case will likely be one of perceived teacher control.

Conclusion

Self-determination theory and invitational education theory share common roots and beliefs. Both theories grew from the movement of psychology and education toward humanism and away from behaviorism. They rejected the idea that all behavior was motivated only by the

rewards and punishments that the environment presented. Instead, these teachers and researchers began to see humans as acting in accordance with their own individual beliefs. IE focuses on schools and classrooms. Self-determination theory has been successfully applied to education, work, sport, and health. However, they share common key beliefs: autonomy is a necessary condition for quality learning; positive relationships support experiences in the classroom; and, the students' perceptions motivate their behaviors. By recognizing and understanding the bonds between SDT and IE, practitioners and theorists will be able to integrate the knowledge from both theories in order to continue to improve classrooms world-wide.

References

- Abrahmson, C. I. (2004). History of psychology timeline. Retrieved from <http://psychology.okstate.edu/museum/history/>.
- Brinson, K. H., & Miller, J. (1995). *Invitational theory and total quality management: Implications for professional practice and educational reform*. Paper presented at the Northeastern Educational Research Association conference, Ellenville, New York.
- Bruner, J. (1966). *Toward a theory of instruction*. Cambridge, MA: Belknap Press.
- Buhler, C. (1971). Basic theoretical concepts of humanistic psychology. *American Psychologist*, 26(4), 378.
- Deci, E. L. (1971). Effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology*, 18(1), 105.
- Deci, E. L. (1972). Intrinsic motivation, extrinsic reinforcement, and inequity. *Journal of Personality and Social Psychology*, 22(1), 113.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Springer US.
- Deci, E. L., & Ryan, R. M. (2002). Overview of self-determination theory: An organismic dialectical perspective. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research*. Rochester, NY: University of Rochester Press.
- Deci, E. L., Sheinman, L., Wheeler, L., & Hart, R. (1980) Rewards, motivation, and self-esteem. *The Educational Forum*, 44, 429-433, doi:10.1080/00131728009336186
- Dewey, J. (1975). *Democracy and education: An introduction to the philosophy of education*: Free Press: New York.
- Klassen, R. M., Perry, N. E., & Frenzel, A. C. (2012). Teachers' relatedness with students: An underemphasized component of teachers' basic psychological needs. *Journal of Educational Psychology*, 104(1), 150.

- Klein, D. (2003). A brief history of American K-12 mathematics education in the 20th century. In J. Royer (Ed), *Mathematical cognition*, 175-259. Charlotte, NC: Information Age Publishing.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370.
- Moustakas, C. (1986). Origins of humanistic psychology. *The Humanistic Psychologist*, 14(2), 122-123. doi:10.1080/08873267.1986.9976764
- Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *School Field*, 7(2), 133-144.
- Novak, J. M. (1981). *Clarity begins at home: An analysis of key ideas of invitational education*. Paper presented at the American Educational Research Association conference, Los Angeles, California.
- Piaget, J. (1936). *The origins of intelligence in children*. New York: Norton.
- Pintrich, P. R. (2000). An achievement goal theory perspective on issues in motivation terminology, theory, and research. *Contemporary Educational Psychology*, 25(1), 92-104.
- Purkey, W. W. (1967). *The self and academic achievement*. Gainesville, FL: Florida Educational Research and Development Council.
- Purkey, W. W., & Stanley, P. H. (1991). *Invitational teaching, learning, and living*. Washington, DC: National Education Association.
- Purkey, W. W. (1970). *Self concept and school achievement*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Purkey, W. W. (2016). History of International Alliance for Invitational Education. Retrieved from <https://www.invitationaleducation.net/iaie/history/>
- Purkey, W. W., & Aspy, D. (2003). Overcoming tough challenges: An invitational theory of practice for humanistic psychology. *Journal of Humanistic Psychology*, 43(3), 146-155.
- Purkey, W. W., & Novak, J. N. (2016). *Fundamentals of invitational education* (A. T. Schoenlein Ed. 2nd ed.). New York: The International Alliance for Invitational Education.
- Reeve, J. (2002). Self-determination theory applied to educational settings. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research*. Rochester, NY: University of Rochester Press.
- Reeve, J. (2014). *Understanding motivation and emotion* (6th ed.). Hoboken, NJ: Wiley.
- Reeve, J., Jang, H., Carrell, D., Jeon, S., & Barch, J. (2004). Enhancing students' engagement by increasing teachers' autonomy support. *Motivation and Emotion*, 28(2), 147-169.
- Rogers, C. (1967). *On becoming a person*. London: Constable.

- Rogers, C., & Carmichael, L. (1942). *Counseling and psychotherapy; newer concepts in practice*. Boston: Houghton Mifflin.
- Ryan, R. M., & Brown, K. W. (2005). Legislating competence. In A.J. Elliot & C. S. Dweck (Eds.), *Handbook of competence and motivation*. New York: Guilford Press.
- Ryan, R. M., & Deci, E. L. (2000a). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary educational psychology*, 25(1), 54-67.
- Ryan, R. M., & Deci, E. L. (2000b). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist*, 55(1), 68.
- Ryan, R. M., & Deci, E. L. (2002). An overview of self-determination theory: An Organismic-dialectical perspective. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination theory*. Rochester, NY: The University of Rochester Press.
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. New York: The Guilford Press.
- Schwartz, B., & Lacey, H. (1982). *Behaviorism, science and human nature*. New York: Norton.
- Sheldon, K. M., & Kasser, T. (2001). Goals, congruence, and positive well-being: New empirical support for humanistic theories. *Journal of Humanistic Psychology*, 41(1), 30-50.
doi:doi:10.1177/0022167801411004
- Skinner, B. F. (1958). Teaching machines. *Science*, 128(3330), 969-977.
doi:10.1126/science.128.3330.969
- Timeline: The development of psychology. (2009) Retrieved from
<https://www.theguardian.com/lifeandstyle/2009/mar/07/timeline-psychology-history>
- Vallerand, R. J., & Ratelle, C. F. (2002). Intrinsic and extrinsic motivation: A hierarchical model. *Handbook of self-determination research*, 128, 37-63.
- Vansteenkiste, M., Lens, W., & Deci, E. L. (2006). Intrinsic versus extrinsic goal contents in self-determination theory: Another look at the quality of academic motivation. *Educational Psychologist*, 41(1), 19-31.
- Wigfield, A., & Eccles, J. S. (2000). Expectancy–value theory of achievement motivation. *Contemporary Educational Psychology*, 25(1), 68-81.
- Zeeman, R. D. (2006). Glasser's choice theory and Purkey's invitational education: Allied approaches to counseling and schooling. *Journal of Invitational Theory and Practice*, 12, 46-51.

To contact the author:

Jennifer D. Moss,
Center for Instructional Excellence, Wilmeth Active Learning Center,
340 Centennial Mall Drive, Suite 3007,
Purdue University,
West Lafayette, Indiana, 47907
Email: moss16@purdue.edu

Psychometric Analysis of the Translated Version of the Inviting School Survey-Revised (ISS-R-2015) and Perceived School Climate in Diverse Tehran Schools

Maryam Safarzadeh (Ph.D. Candidate)

Dr. Hassan Asadzadeh

Dr. Ali Delavar

Dr. Fariborz Dortaj

Dr. Noorali Farookhi

University of Allameh Tabataba'i, Tehran, Iran

Abstract

The present study examined the school climate of various types of schools in Tehran Iran. School climate was defined as the perceptions of 9th grade pupils in five areas: People, Programs, Policies, Processes, and Places based on the Invitational Theory and Practice paradigm. In this study we examined the climate of three types of schools: public, government samples, and nonprofit schools. In order to examine this, a valid and reliable instrument that measure the perceptions of school climate was needed. Therefore, the researchers used the Inviting School Survey (Revised Version 2015, ISS-R) based on an investigation of the factor structure, validity and reliability of the ISS-R (translated form). Results showed that translated version of ISS-R had an acceptable internal consistency, Cronbach's alpha coefficient for the total scale was 0.96 and for subscales was between 0.73 and 0.92 and confirmatory factor analysis confirmed that the structure of the translated version of ISS-R provided an acceptable fit with the data and all goodness indicators of fitness for the model. The results of the study showed that unfortunately the school climate for Tehran public schools were identified as disinventing. For these schools, the mean of most factors was less than 3. Program (3.09) and Process (3.04) factors for these schools were identified as somewhat inviting. However, with the other two types of Tehran schools studied, all factors but place were identified as somewhat inviting. The mean of the place factor for government samples and nonprofit schools was identified as disinventing.

Keywords: Inviting schools, Tehran public schools, Tehran government sample, Tehran nonprofit schools, School climate.

Introduction

There is growing evidence that school climate is one of the most important factors to student achievement, success, and psychological well-being (Fan, Williams, & Corkin, 2011; Zullig, Koopman, Patton, & Ubbes, 2010; Cohen, McCabe, Michelli, & Pickeral, 2009). School climate influences healthy development as well as effective risk prevention, positive youth development, and increased teacher and student retention (Cohen et al., 2009; Huebner & Diener, 2008). School administrators should be aware of the perceptions from the school community in order to make informed decisions about school development. Therefore, they need reliable and valid instruments that measure the perceptions of school climate from the school community. The *Inviting School Survey-Revised (ISS-R)*, grounded on Invitational Theory and Practice, seeks to meet this need. The ISS-R was designed to assess the total school climate and the five

environmental areas as outlined by Invitational Education theory: People, Places, Policies, Programs, and Processes (Purkey & Novak, 1996, 2008; Purkey & Schmidt, 1990).

The goal of education is to increase the ability of students to adapt to the rapid changes of the world and facing the challenges of globalization and information technology in the future. Educators can improve a student's opportunities for academic success by changing the school environment (Lehr, 2004). The positive school climate makes students have a chance to get quality education and realize high academic achievement (McEvoy & Welker, 2000). Since today the theory of creating an inviting environment in schools, students' self-concept development and positive perception of the school are supported as the basis of the quality education, researcher intends to examine students' perceptions about their school climate in Tehran. In order to assess the inviting and disinventing areas of schools, having appropriate instrument is essential. Therefore, the introduction and presentation of an appropriate instrument and its psychometric evaluation (factor validity and reliability) is needed in this research. In the present study, school climate is defined as the perceptions of 9th grade pupils in five areas: People, Programs, Policies, Processes, and Places based on the Invitational theory and Practice Paradigm. In particular, the purposes of this study are: 1) to examine the reliability of inviting school survey. 2) To examine the validity of inviting school survey. 3) To examine school climate of Tehran's schools.

The Inviting School Survey-Revised (ISS-R)

The Inviting School Survey-Revised based on Invitational Theory and Practice, developed by William W. Purkey and colleagues (Purkey, 1978; Purkey & Stanley, 1991; Purkey & Novak, 1996; Purkey & Schmidt, 1987, 1990, 1996) and was developed to empirically identify areas in a school that are inviting and disinventing. Originally, the *ISS* was a 100-item, Likert scale instrument that was scaled manually and used by a small number of schools (Purkey and Fuller, 1995). In 2004, a detailed psychometric study of the original 100-item *ISS*, was conducted by Smith & Bernard (Smith & Bernard, 2004). The results of this study and further analyses, such as factor and reliability analyses, showed that reducing the present 100-item *ISS* to 50-item did not compromise its reliability significantly (Smith & Bernard, 2004). The reliability (internal consistency) of the Inviting School Survey was evaluated by Chronbach's alpha coefficients. Results of the analyses can be found Table 1. As shown by the results the internal consistency of the *ISS-R* is reasonably good.

Table 1

Inviting School Survey Chronbach's Coefficient Alphas for 100 and 50 Item (Smith & Bernard, 2004)

Number of Items	People	Program	Process	Policy	Place	Total
100	0.81 30 items	0.54 10 items	0.68 20 items	0.61 20 items	0.71 20 items	0.93 100 items
50	0.77 16 items	0.48 7 items	0.49 8 items	0.52 7 items	0.66 12 items	0.88 50 items

Smith (2005) revised the original 100-item instrument to become a 50-item, on-line, computer scored instrument, the Inviting School Survey-Revised (*ISS-R*). Both the original *ISS* and the *ISS-R* are designed to be completed by students (ages 8 and above), parents, teachers, school administrators, support staff, and volunteers.

The ISS-R provides school communities with a user-friendly, theoretical-grounded, empirical-based instrument that assists in evaluating schools for future development, as the ISS-R identifies areas of strength and weakness in a school's climate and the five environmental domains of People, Programs, Processes, Policies, and Places, as outlined in Invitational Education theory (Purkey & Novak, 1996). The Inviting School Survey (*ISS-R*) presents a global picture of life in school as inviting or disinviting.

The *ISS-R* (Smith, 2015) based on the theoretically five-factor model is comprised of 50 items in Likert scale: 1. People (16 items), 2. Program (7 items), 3. Process (8 items), 4. Policy (7 items), 5. Place (12 items). The *ISS-R* is designed for electronic, self-administration through the IAIE website. Individuals completing the *ISS-R* are asked to respond to all items ranging from 1, 'Strongly Disagree' to 5, 'Strongly Agree' (0, 'Not Applicable' is treated as missing, if a question is not relevant to the participant's school context). If there are less than six missing or 'N/A' responses these items' scores are replaced by the participant's subscale item mean. As such, the *ISS-R* total scale score can range from 50 to 250. Surveys with more than 5 missing responses are not scored. The validity of the *ISS-R* has been empirically documented and its reliability (internal consistency) has been reported to range from .81 to .97 (Smith, 2015). Results has been shown in Table 2.

Table 2

Inviting School Survey-Revised Chronbach's Coefficient Alphas for 50 Item (Smith, 2015)

Number of Items	People	Program	Process	Policy	Place	Total
50	0.93	0.82	0.85	0.81	0.89	0.97

School climate

According to the National School Climate Centre (NSCC, 2011), school climate is the quality of life in a school experienced by students and staffs. School climate reflects the norms, goals, expectations, values, interpersonal relationships, teaching and learning practices, and organizational structures. A positive school climate fosters students' development and learning necessary for a productive, contributing, and satisfying life in a democratic society. The prevailing school climate is acknowledged to be one of the most important influences on students' achievement and success (Purkey, 2011).

A positive school climate is characterized by trust, effective communication, cooperation, and warmth and commitment shown by school staff towards students, leading to a sense of membership in the school community (DeLuca & Rosebaum, 2000). Students in these schools are more engaged in learning, feel more attachment to the school and staff, and exert greater effort. Longitudinal studies have also suggested that school climate can impact upon student achievement (Esposito, 1999; Ross & Lowther, 2003).

In Invitational Education theory school climate is composed of 5 domains: People, Places, Policies, Programs and Processes. These domains in schools should be so intrinsically inviting as to create a school climate in which each individual is encouraged to develop to his or her highest level intellectually, socially, physically, psychologically and morally (Purkey & Schmidt, 1990). In the current study school climate is defined as the perceptions of 9th grade pupils in five areas: People, Programs, Policies, Processes, and Places based on the Invitational theory and Practice Paradigm.

Inviting schools

An inviting school implements the principles of Invitational Education and deliberately adopts policies and practices that are compatible with it (Novak, Rocca & DiBiase, 2006; Purkey & Novak, 1996). The four qualities of Invitational Theory are respect, trust, optimism, and intentionality.

- Respect: People are able, valuable, and responsible and should be treated accordingly.
- Trust: Educational and other helping relationships should be cooperative, collaborative activities where process is as important as product.
- Optimism: People possess untapped potential in all areas of worthwhile human endeavor.
- Intentionality: Human potential can best be realized by creating and maintaining places, policies, process, and programs, specifically designed to invite development, and by people who are intentionally inviting with themselves and others, personally and professionally.

The five domains of Invitational Education: people, places, policies, programs, and processes are powerful part of environmental components that provide a framework for transforming a whole school to become invitational.

- People: In inviting school, the most important domain of school climate is “People”. People create and maintain the invitational climate through their actions, attitudes, words and relationships. It is fundamental to the invitational model that all individuals should demonstrate respect for one another. In school, this respect is evident in the caring, supportive and encouraging behaviors that teachers, other adults and students display toward others (Smith, 2007).
- Place: A pleasant physical environment is crucial for helping students feel valued and comfortable. Any part of the physical environment that is unpleasant, unattractive, littered, grimy, dusty or dingy is disinviting. To change an environment for making a school more inviting, the most obvious component to begin is the physical setting.
- Process: Process is the factor that indicates how the school is operating, how the people are acting, rather than what is being done.
- Policies: Policies refer to guidelines, rules, procedures, codes, directives and so forth that regulate the ongoing functions of the school. Policies reveal the perceptual orientations of the policy-makers.
- Programs: Programs, represents an area that can be either inviting or disinviting for students. Some programs are not inviting because they focus on narrow goals and neglect the wide scope of human concerns.

Statistical population, sample and sampling method

This research is part of a non-experimental research conducted within the framework of a descriptive-analytic research project. The statistical population of the study included 9th grade of Public schools, Government sample and Non-profit students studying in the academic year of 2016-2017 in Tehran. The statistical population included 88475 (45225 boys and 43250 girls) ninth grade pupils. According to the number of scale questions and based on the Morgan table, the sample size was estimated at 384 people. In this study, for generalizability and avoidance of loss in the sample, 400 students of the 9th grade were selected through stratified sampling and responded to the translated version of the ISS-R. Out of all distributed questionnaires, 13 non-completed questionnaires were excluded. Finally, 387 (216 girls and 171 boys, consisted of 296 students of Public schools, 64 Nonprofit and 27 students Of Government sample schools) formed the research sample.

Methodology

In this study to measure school climate, data were collected through a translated version of ISS-R questionnaire. Since, this instrument was used for the first time in Iran, and we translated it to Persian and examined the psychometric analysis (reliability and validity) of the translated version of ISS-R. For this, we carried out the following steps: Step 1: Two bilingual individuals translated the English version (ISS-R) into a Persian version (ISS-RP). Step 2: Two bilingual experts, different from the two translators used in Step 1, converted the translated instrument back into the original English language without having seen the original instrument. Step 3: Experts in the field of educational psychology, examined both versions in terms of consistency, grammar, and structure. Step 4: After reaching a consensus in relation to the consistency of the translations of the ISS-R, a Persian version of the ISS-R was produced.

At last, sample group completed the translated version of ISS-R questionnaire. Cronbach's alpha and coefficient confirmatory factor analysis were used to verify and determine the reliability and validity of the translated version of ISS-R questionnaire. Results of psychometric analysis has been reported in finding section. Participants responded to 50 items on a five-point Likert scale ranging from "strongly disagree" to "strongly agree" ("N/A "if a question is not applicable to the participant's context). The items addressed each of the five factors: People, Places, Policies, Programs, and Processes. After completing the questionnaire by participants, the score of each factor was calculated. Finally, Descriptive quantitative analyses (mean, standard deviation, Standard error of estimation, minimum, maximum) were conducted using SPSS and LISREL to measure school climate and to determine the validity and reliability of translated version of the inviting school survey.

Findings

In the current study the reliability (internal consistency) of the Inviting School Survey was evaluated by Chronbach's alpha coefficients. Results of the analyses can be found Tables 3-8. As shown by the results, the internal consistency of the translated version of ISS-R is reasonably good, and the coefficients are comparable with Smith's research results (2015).

Table 3

Chronbach's Coefficient Alphas for the translated version of ISS-R

Number of Items	People	Program	Process	Policy	Place	Total
50	0.929	0.858	0.884	0.737	0.734	0.963

In this research, the reliability of each area is examined separately. In the following tables, the descriptive indexes of the questions (including the correlation of the question with the whole test and the reliability coefficients of the remaining questions with the removal of each question) for each area are presented. In these tables, the correlation of each item with the total score of the questionnaire was calculated and reported, which indicates that the questionnaire is desirable. Also, the reliability of the questionnaire after the removal of each item is also recalculated, which is known as the Loop method. Removing each item indicates that when the items are deleted, the total reliability of the questionnaire decreases or there is no significant change in the desirability of these statements. Based on the results of Table 3, it is clear that the reliability of all subscales is good. In the following, descriptive features of the measuring tools including mean of scale with

question deletion, scale variance with deletion of question, corrected whole correlation and Cronbach's alpha with question deletion for all subscales are discussed.

Table 4
Descriptive features of people

Question	Scale mean with question deletion	Scale variance with question deletion	Modified partial-whole Correlation	Cronbach's alpha with question deletion
Q3	47.9974	147.863	.539	.927
Q6	46.9302	146.728	.607	.926
Q9	47.1395	141.364	.764	.921
Q12	47.3902	142.581	.739	.922
Q15	46.5530	146.320	.611	.925
Q18	47.2481	146.581	.652	.925
Q21	46.4599	144.892	.711	.923
Q24	47.1705	140.054	.789	.921
Q27	47.0749	141.308	.760	.922
Q30	47.1912	148.901	.505	.928
Q33	46.6822	142.689	.653	.924
Q36	46.8062	145.183	.580	.926
Q39	47.1680	143.000	.645	.925
Q42	46.7287	143.566	.670	.924
Q45	46.7106	144.849	.515	.929
Q48	47.5013	145.945	.639	.925

Table 5
Descriptive features of program

Question	Scale mean with question deletion	Scale variance with question deletion	Modified partial-whole Correlation	Cronbach's alpha with question deletion
Q2	19.4057	21.568	.608	.841
Q10	19.1680	19.430	.723	.823
Q17	20.1137	22.288	.428	.865
Q23	19.1886	19.304	.711	.825
Q31	19.3979	21.701	.567	.846
Q38	19.1964	20.143	.677	.830
Q46	18.8165	20.601	.664	.832

Table 6
Descriptive features of process

Question	Scale mean with question deletion	Scale variance with question deletion	Modified partial-whole Correlation	Cronbach's alpha with question deletion
Q1	22.6822	27.901	.579	.876
Q7	22.0284	25.696	.672	.868
Q14	21.6382	25.356	.694	.865
Q22	22.0465	26.863	.645	.870
Q29	22.5685	26.536	.675	.867
Q35	22.7080	27.326	.562	.879
Q43	21.8450	26.199	.736	.861
Q50	21.9070	27.173	.664	.869

Table 7
Descriptive features of policy

Question	Scale mean with question deletion	Scale variance with question deletion	Modified partial-whole Correlation	Cronbach's alpha with question deletion
Q5	16.7003	16.770	.395	.719
Q11	17.1137	16.474	.484	.699
Q19	17.4238	17.162	.494	.701
Q26	17.5297	17.296	.485	.703
Q34	16.4935	15.152	.509	.692
Q41	17.2661	17.527	.285	.745
Q47	16.7442	14.336	.555	.680

Table 8
Descriptive features of place

Question	Scale mean with question deletion	Scale variance with question deletion	Modified partial-whole Correlation	Cronbach's alpha with question deletion
Q4	29.5323	20.219	.221	.734
Q8	28.2222	18.862	.512	.702
Q13	27.6848	18.237	.488	.701
Q16	28.9535	18.666	.520	.700
Q20	28.9587	18.915	.402	.712
Q25	28.3101	18.696	.440	.707
Q28	28.6021	18.696	.379	.715
Q32	29.3695	20.513	.211	.734
Q37	29.5814	20.415	.209	.735
Q40	28.7545	19.486	.282	.728
Q44	28.5866	18.658	.416	.710
Q49	27.2868	18.133	.367	.719

The confirmatory factor analysis was used to confirm the factor structure of the instrument (using Liserl version 8.5). To examine fit modeling, fit indices have been used which are reported in Table 9.

Table 9
Confirmatory Factor Analysis Indicators of Inviting School Survey

index	Chi-square	RMSEA	NFI	NNFI	CFI	GFI	AGFI
estimate	3144.99	0.074	0.95	0.97	0.97	0.91	0.89

P < 0.01

As shown in table 9 (above), the results indicate that all the indices are highly desirable, and the model is fitted with the data, which indicates the alignment of the elements with the theoretical construct. Table 10 shows the most important parameters of the structural measurements and all reported factor loads are significant at the surface ($p < 0.01$). In table 10 (p. 38), some parameters including standardized load factor, t value and multiple squared correlation are reported. These parameters point to whether the questions of each subscale are appropriate or not. In this table, the value of t shows that all factor loadings of questions are significant at the level ($p < 0.01$). As shown in the above table, in accordance with the model presented in Table (9), which confirms the fitness and suitability of the model, the measurement parameters of the structures are appropriate. The standardized values of the parameter represent the factor load power of each question on the factor of the various sub-scales, and it shows that each question explains how much the sub-scale variance is. Whatever factor load is big, variance will be

explained better. And in sum these factor loads show the variance of each sub-scale. T values greater than 2 shows variance significant. According to Table 10, All reported cases are significant at level ($p < 0.01$). In fact these coefficients are the correlation coefficient of linear correlation and the correlation coefficient of variance indicated. In this table, all the questions of the questionnaire are presented and, in sum, these results indicate that the ISS-R has all necessary parameters for evaluating inviting and disinviting parts of a school.

Table 10

Parameters of the ISS-R Measurement Pattern in Confirmatory Factor Analysis

		β	t	Multiple squared correlation
1	Students work cooperatively with one another.	0.54	12.61	0.36
2	Everyone is encouraged to participate in athletic (sports) programs.	0.61	14.48	0.45
3	The principal involves everyone in the decision-making process.	0.62	11.78	0.32
4	Furniture is pleasant and comfortable.	0.2	5.14	0.07
5	Teachers are willing to help students who have special problems	0.62	12.02	0.33
6	Teachers in this school show respect for students.	0.68	13.8	0.41
7	Grades are assigned by means of fair and comprehensive assessment of work and effort.	0.8	16.67	0.55
8	The air smells fresh in this school.	0.36	10.85	0.3
9	Teachers are easy to talk with.	0.91	18.39	0.62
10	There is a wellness (health) program in this school.	0.87	18.44	0.64
11	Students have the opportunity to talk to one another during class activities.	0.54	11.31	0.3
12	Teachers take time to talk with students about students' out-of-class activities.	0.85	17.33	0.57
13	The school grounds are clean and well-maintained.	0.44	10.82	0.3
14	All telephone calls to this school are answered promptly and politely.	0.81	16.69	0.55
15	Teachers are generally prepared for class.	0.7	13.80	0.41
16	The restrooms in this school are clean and properly maintained.	0.36	10.47	0.28
17	School programs involve out of school experience.	0.51	9.92	0.24
18	Teachers exhibit a sense of humor.	0.69	15.01	0.46
19	School policy permits and encourages freedom of expression by everyone.	0.43	10.41	0.26
20	The principal's office is attractive.	0.38	9.46	0.24
21	People in this school are polite to one another.	0.76	16.69	0.54
22	Everyone arrives on time for school.	0.68	15.53	0.50
23	Good health practices are encouraged in this school.	0.86	17.61	0.60
24	Teachers work to encourage students' self-confidence.	0.97	19.42	0.67
25	Bulletin boards are attractive and up-to-date.	0.47	12.23	0.37
26	The messages and notes sent home are positive.		11.56	0.31
27	The principal treats people as though they are responsible.	0.92	18.49	0.63

28	Space is available for student independent study.	0.42	9.61	0.24
29	People often feel welcome when they enter the school.	0.69	15.64	0.5
30	Students work cooperatively with each other.	0.59	11.20	0.29
31	Interruptions to classroom academic activities are kept to a minimum.	0.57	12.85	0.37
32	Fire alarm instructions are well posted and seem reasonable.	0.28	2.2	0.07
33	People in this school want to be here.	0.85	15.17	0.47
34	A high percentage of students pass in this school.	0.74	12.91	0.37
35	Many people in this school are involved in making decisions.	0.62	13	0.38
36	People in this school try to stop vandalism when they see it happening.	0.73	12.90	0.37
37	Classrooms offer a variety of furniture arrangements.	0.16	4.09	0.049
38	The school sponsors extracurricular activities apart from sports.	0.77	16.50	0.54
39	Teachers appear to enjoy life.	0.83	14.72	0.45
40	Clocks and water fountains are in good repair.	0.26	6	0.1
41	School buses rarely leave without waiting for students.	0.32	5.6	0.08
42	School pride is evident among students.	0.81	15.43	0.48
43	Daily attendance by students and staff is high.	0.74	18.17	0.62
44	There are comfortable chairs for visitors.	0.42	10.06	0.26
45	Teachers share out-of-class experiences with students.	0.75	11.55	0.31
46	Mini courses are available to students.	0.71	15.99	0.52
47	The grading practices in this school are fair.	0.86	14.45	0.45
48	Teachers spend time after school with those who need extra help.	0.72	14.62	0.45
49	The lighting in this school is more than adequate.	0.46	3.4	0.22
50	Classes get started quickly.	0.63	15.50	0.49

Based on the results reported on Table 11, analysis of the three school types, indicates place (2.60) has the lowest mean and program (3.22) exhibits the highest mean.

Table 11

Statistical indexes; mean, standard error of mean estimation, and standard deviation in all three school types

	Mean	Standard Deviation	Standard Error of Estimate	Maximum	Minimum
place	2.6049	.39285	.01997	3.50	1.33
policy	2.8398	.66041	.03357	4.29	1.00
people	3.1365	.79947	.04064	4.81	1.13
process	3.1683	.73119	.03717	4.88	1.13
program	3.2211	.74981	.03812	4.86	1.00
total	2.9843	.60595	.03080	4.18	1.34

Based on the results reported on Table 12, analysis of non-profit schools, indicates place (2.84) has the lowest mean and people (3.72) exhibits the highest mean

Table 12

Statistical Indicators; Mean; Standard Error Estimates; Standard Deviation in Nonprofit Schools

	Mean	Standard Deviation	Standard Error of Estimate	Maximum	Minimum
place	2.8398	.27987	.03498	3.50	1.33
policy	3.2076	.43490	.05436	4.14	2.00
people	3.7227	.49874	.06234	4.81	2.50
process	3.6270	.45340	.05330	4.63	2.38
program	3.7031	.74981	.05668	4.86	3.00
total	3.4206	.33468	.04184	4.00	2.76

Based on the results reported on Table 13, analysis of government sample schools, indicates place (2.77) has the lowest mean and people (3.47) exhibits the highest mean.

Table 13

Statistical Indicators; Mean; Standard Error Estimates; Standard Deviation in government sample schools

	Mean	Standard Deviation	Standard Error of Estimate	Maximum	Minimum
place	2.7778	.37268	.07172	3.33	2.08
policy	3.2222	.46769	.09001	4.00	2.14
people	3.4745	.62530	.12034	4.44	2.44
process	3.4676	.46847	.09016	4.38	2.63
program	3.4497	.52069	.10021	4.43	2.29
total	3.2674	.44130	.08493	3.88	2.46

Lastly, based on the results reported on Table 14 (p. 41), analysis of public schools, clearly indicates place (2.54) has the lowest mean and people (3.10) exhibits the highest mean.

Table 14

Statistical Indicators; Mean; Standard Error Estimates; Standard Deviation in public schools

	Mean	Standard Deviation	Standard Error of Estimate	Maximum	Minimum
place	2.5383	.39218	.03498	3.33	1.33
policy	2.7254	.67465	.03921	4.29	1.00
people	2.9789	.79925	.04646	4.81	1.13
process	3.0418	.75598	.04394	4.88	1.13
program	3.0960	.77264	.04491	4.57	1.00
total	2.8641	.61337	.03565	4.18	1.34

Discussion

School climate includes the interactions between students' and teachers' perception of their school environment (e.g. environmental factors such as physical buildings and classes, materials used in education); academic performance; feelings of safety (Mayer, 2007); feelings of respect and trust in the school community (Purkey and Novak , 2008; Smith, 2013; Kuperminca, Leadbeatera and Blatta, 2001; Marshall, 2004). School climate is positive when everyone in the school feels comfortable, enthusiastic, valued, accepted and secure (Mayer, 2007). Schools with a positive atmosphere encourage the participation of teachers, students and parents, which in turn make the school successful (American School Counselor Association, 2003; Koth et al., 2008).

Purkey showed that when the school climate is positive it becomes inviting (Novak et al., 2006; Purkey and Novak, 2008). Creating an inviting school requires that students, families, and educators work together to develop, live, and contribute to a shared school vision (Cohen et al., 2009; Novak et al., 2006). A safe and happy school helps children to accept education eagerly (Mayer, 2007). An inviting school leads to less aggression, less vandalism and less absenteeism by students. According to Purkey and Novak (2008), schools should provide a warm, intimate and caring environment for students to learn and succeed.

Therefore, due to the importance of the inviting school, the aim of this study was to investigate the psychometric properties of school climate in the Iranian community. In order to determine the desirability of reliability coefficient index, the coefficient of internal consistency was used. The reliability coefficient for the whole scale and its factors is between 0.73 and 0.96, which is a desirable coefficient and is close to studies conducted in other cultures. Confirmatory factor analysis method has been used to assess the structure of the ISS-R in a sample of Iranian students. According to the findings of the research, it can be concluded that appropriate questions have been selected and the questionnaire with the least possible change and possible removal of some of its structure questions is preserved; therefore, cultural and racial differences and the various experiences of Iranian learners in comparison with non-Iranian learners does not cause it is evaluated differently. In summary, the *ISS-R* is a valuable and informative instrument with reliable and desirable psychometric properties which is used by schools to assess invitational qualities of the school (To identify areas of strength or weakness in a school's climate).

Therefore, the ISS-R has validity and reliability in Iran's society, accurately assesses the climate of the school, and can be used in educational, research, and behavioral modification situations, and can provide numerous studies in the realm of educational psychology. Of course, it should be noted that since the psychometric evaluation of this questionnaire took place for the first time in Iran and only 9th grade students were involved in this study, the 9th grade of the subjects may affect the outcome. Therefore, more psychometric studies of this questionnaire are suggested for different grades and other people (teachers, staff). Also, the predictive validity of this instrument should be examined. Further psychometric support of this instrument will allow it to be used as an instrument to determine students' perceptions of inviting areas of the school climate and the sense of security in it, designing appropriate interventions and preventative programs.

Also, this research was carried out with the aim of spreading knowledge about the school climate of Public schools, Government sample and nonprofit schools in Tehran.

In the current study, aspects of school climate were considered “most inviting” if the scores were equal to or more than 85% (mean 4.25 to 5), “somewhat inviting “ between 60 -85% (mean 3 to 4.25) , “ disinviting” between 50 - 60% (mean 2.5 to 3) and “most disinviting “ when the score is less than 50% (mean less than 2.5).As shown in table 11, in all 3 school types, the ISS-R total score was 2.98 and subscales ranged from 2.60 (place) to 3.22 (program).

The results of the present study indicate that in all 3 school types, processes”, “program” and “people” had means of 3.16, 3.22 and 3.13 respectively which shows that the perceptions of the respondents were somewhat favorable and therefore fairly inviting. However, “place” and “policy” had means of 2.60 and 2.83 respectively which shows that the perceptions of the respondents were not favorable therefore these aspects were disinviting. But in Nonprofit and Government sample schools the mean were more than 3 for each aspect, which shows that the perceptions of the respondents were somewhat favorable and therefore fairly inviting in these schools, but in both schools the mean of place was less than 3, so, this aspect of the schools were disinviting. Unfortunately, in Public schools most of the aspects had means less than 3. “People”, “place” and “policy” had means of 2.97, 2.53, and 2.72 respectively which shows that the perceptions of the respondents were not favorable, indicating these aspects were disinviting.

“Processes” and “programs” had means of 3.04, 3.09 respectively which shows that the perceptions of the respondents were somewhat favorable and therefore fairly inviting. The total mean of public school was less than 3 (2.86) therefore, the perceptions of the respondents were not favorable and public schools was disinviting, but the total mean of Nonprofit and Government sample schools was 3.42 and 3.26 respectively which shows that the perceptions of the respondents were somewhat favorable and therefore these schools were fairly inviting. Results in this study shows that, none of the factors have been perceived by students as the most inviting, and the factor of place in all 3 school types were disinviting. Due to the importance of the school climate, it is desirable for officials and policymakers to pay special attention to promoting the inviting atmosphere of schools, particularly in public schools that have exhibited a total disinviting score.

References

- American School Counselor Association (ASCA) (2003). Taking your school's temperature: How school climate affect students and staff. School Counselor Resource Series. Retrieved from <http://www.schoolcounselor.org/files/school%20climate.pdf>
- Cohen, J., McCabe, E. M., Michelli, N. M., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *School Climate Research and Educational Policy*, 3(1), 180-213.
- Deluca, S., & Rosenbaum, J. E. (2000). Are dropout decisions related to safety concerns, school isolation, and teacher disparagement? Retrieved from <http://www.northwestern.edu/ipr/publications/workingpapers/wpabstracts00/wp0018.html>
- Esposito, C. (1999). Learning in urban blight: School climate and its effect on the school performance of urban, minority, and low-income children. *School Psychology Review*, 28(3), 365-377.
- Fan, W., Williams, C., & Corkin, D. (2011). A multilevel analysis of student perceptions of school climate: The effect of social and academic risk factors. *Psychology in the schools*, 48(6), 632-647.
- Huebner, E., & Diener, C. (2008). Research on life satisfaction of children and youth: Implications for the delivery of school-related services. In M. Eid & R. Larsen (Eds.), *the science of subjective wellbeing* (pp. 376-392). New York, NY: Guilford.
- Koth, C. W., Bradshaw, C., & Leaf, P. J. (2008). A multilevel study of predictors of student perceptions of school climate: The effect of classroom-level factors. *Journal of Educational Psychology*, 100 (1), 96-104.
- Kuperminc, G. P., Leadbeater, B. J., & Blatta, S. J. (2001). School social climate and individual differences in vulnerability to psychopathology among middle school students. *Journal of School Psychology*, 39(2), 141-159.
- Lehr, C. A. (2004). Positive school climate: Information for educators. Retrieved from http://www.nasponline.org/communications/spawareness/schclimate_ho.pdf
- Marshall, M. L. (2004). Examining school climate: Defining factors and educational influences [white paper, electronic version]. Retrieved from Georgia State University Center for School Safety, School Climate and Classroom Management website: <http://education.gsu.edu/schoolsafety>
- Mayer, J. E. (2007). *Creating a safe and welcoming school*. Geneva: UNESCO.
- McEvoy, A., & Welker, R. (2000). Antisocial behavior, academic failure, and school climate. *Journal of Emotional and Behavioral Disorders*, 8(3), 130-140.
- Novak, J. M., Rocca, W., & DiBiase, A.-M. (Eds.). (2006). *Creating Inviting Schools*. San Francisco, CA: Caddo Gap Press.
- NSCC (National School Climate Centre). (2011). what is school climate and why is it important? Retrieved from: <http://www.schoolclimate.org/climate/>

- Purkey, W. (1978). *Inviting school success*. Belmont, CA: Wadsworth.
- Purkey, W. W. (2011). School climate contributes to student achievement and success. *Invitational Education Forum*, 31(1), 7.
- Purkey, W., & Fuller J. (1995). *The Inviting School Survey (ISS): User's Manual*. Greensboro, NC: University of North Carolina at Greensboro.
- Purkey, W., & Novak, J. (1996). *Inviting school success: A self-concept approach to teaching, learning, and democratic practice* (3rd ed.). Belmont, CA: Wadsworth.
- Purkey, W., & Novak, J. (2008). *Fundamentals of invitational education*. Kennesaw, GA: International Alliance for Invitational Education.
- Purkey, W., & Schmidt, J. (1987). *The inviting relationship: An expanded perspective for professional helping*. Englewood Cliffs, NJ: Prentice-Hall.
- Purkey, W., & Schmidt, J. (1990). *Invitational learning for counseling and development*. Ann Arbor, MI: Eric/Caps Clearinghouse. The University of Michigan.
- Purkey, W., & Schmidt, J. (1996). *Invitational counseling: A self-concept approach to professional practice*. Pacific Grove, CA: Brooks/Cole.
- Purkey, W., & Stanley, P.H. (1991). *Invitational teaching, learning and living*. Washington, DC: National Education Association Professional Library Publication.
- Ross, S. M., & Lowther, D. L. (2003). Impacts of the Co-nect school reform design on classroom instruction, school climate and student achievement in inner-city schools. *Journal of Education for Students Placed at Risk*, 82(2), 215-246.
- Smith, K. (2007). *Manual for the Inviting School Survey- Revised (ISS-R)*. A survey for measuring the Invitational Qualities (I.Q.) of the total school climate. Retrieved from <http://www.invitationaleducation.net>.
- Smith, K. (2013). *Manual for the Inviting Survey (ISS-R): A survey for measuring the invitational qualities (I.Q.) of the total school climate* (2nd ed.). Retrieved from: <http://www.invitationaleducation.net>
- Smith, K. (2015). *Inviting School Survey- Revised (ISS-R)*. A survey for measuring the invitational qualities of school climate. Retrieved from: <http://www.invitationaleducation.net>.
- Smith, K., & Bernard, J. (2004). The psychometric properties of the Inviting School Survey (ISS): An Australian study. *Journal of Invitational Theory and Practice*, 10, 7-25.
- Zullig, K. J., Koopman, T. M., Patton, J. M., & Ubbes, V. A. (2010). School climate: Historical review, instrument development, and school assessment. *Journal of Psychoeducational Assessment*, 28(2), 139-152.

To contact the authors:

Hassan Asadzadeh (PhD) asadzadeh@atu.ac.ir Associate Professor of Educational Psychology,
University of Allameh Tabataba'i, Tehran, Iran

Maryam Safarzadeh, PhD candidate in Educational Psychology, University of Allameh
Tabataba'i, Tehran, Iran

Ali Delavar (PhD) Professor of Research Methods and Statistics, University of Allameh
Tabataba'i, Tehran, Iran

Fariborz Dortaj (PhD) Professor of Educational Psychology, University of Allameh Tabataba'i,
Tehran, Iran

Noorali Farookhi , Associate Professor of Educational Psychology, University of Allameh
Tabataba'i, Tehran, Iran

Secondary Students' Self-Perceptions of School Climate and Subjective Well-Being: Invitational Education Meets Positive Psychology

Kathy L. Reid
Master of Psychology Candidate
Australian Catholic University

Dr Ken Smith
Association Professor
Australian Catholic University

Abstract

This study investigated the relationship between secondary students' self-perceptions of school climate and subjective well-being based upon the tenets of Invitational Education Theory and Positive Psychology. The present study not only examined the relationship between the two constructs but also, if Gender and Year Level mediate such a relationship. School climate was operationally defined according to Invitational Educational Theory while student well-being was defined according to positive psychology's PERMA model of well-being. The participants included 120 students from a large high school in the state of New York. Findings indicated evidence for a significant relationship between students' self-perceptions of school climate and subjective well-being and insignificant mediation by various demographic factors. Implications for practice include providing a method for educational administrators to evaluate and improve their school climate for the promotion of student well-being. Further research on a larger sample is recommended to understand the relationships between student well-being and perceptions of school climate in various contexts.

Keywords: invitational education theory, positive psychology, school climate, secondary students, self-perceptions, subjective well-being

Introduction

The well-being of Australian young people has received significant focus in education policy, research, and practice. In Australian young people aged 4 to 17 years old, 13.9% have experienced a mental health disorder. In terms of the impact on functioning, the severity ranges from mild (8.3%), moderate (3.5%), to severe (2.1%) (Australian Bureau of Statistics, 2007; Lawrence et al., 2015). Educational settings are optimally placed to address the concerning prevalence of mental health disorders in young people (Aldridge, Fraser, Fozdar, Ala'i, Earnest, & Afari, 2016; Cohen, 2006). Extensive research has placed school climate as the most prominent target for the promotion of student well-being in educational institutions (Koth, Bradshaw, & Leaf, 2008; Mitchell, Bradshaw, & Leaf, 2010; Voight & Nation, 2016). Additionally, a wide range of school-based student well-being initiatives, including programmes such as KidsMatter, Mind Matters, Positive Psychology, and the National Safe Schools Framework have been initiated in schools (Lawrence et al., 2015; McKenzie, Vidair, Eacott, & Sauro, 2017).

School climate is represented by the pattern of student's experiences of school life that are reflected in the people, places, policies, programs, and processes of a school (Purkey & Novak, 2016). While well-being may be defined in a variety of ways, Seligman's (2011) well-being theory reflects the multidimensional nature of the construct as comprised of positive emotions, engagement, relationships, meaning, and accomplishment. The current study seeks to understand the relationship between students' perceptions of their school climate and their self-reported perceptions of their well-being.

Literature Review

The Importance of Perception

Perceptual psychology states that our perceptions, which are the way we think about others and ourselves, direct our behavior (Beck, 2011; Meichenbaum, 1977). Our perceptual systems provide a representation of reality rather than one of objective reality (Burton, Westen, & Kowalski, 2011; Rogers, 1951). Both the perceptual tradition and social cognitive theory recognize the meaningfulness of perceptions for understanding and predicting individual behavior (Bandura, 1986, 2001; Purkey & Novak, 2016). Student perceptions are a reflection and product of school climate that provide an individual-level analysis of the perceived school climate that differs based on individual characteristics and experiences (Carmen & Mantak, 2011; Cohen, 2006; Ng & Yuen, 2011). Perceptions are shaped by both individual and school-level factors with individual-level factors, such as gender and ethnicity being responsible for much of the variance in student perceptions of school climate. This is compared to school-level factors such as school size, staff turnover, and socioeconomic area (Fan, Williams, & Corkin, 2011; Koth et al., 2008; Ng & Yuen, 2011).

Student perceptions of a positive school climate are associated with a range of positive outcomes for psychological well-being, academic engagement, academic performance, and student behavior (Berg & Aber, 2015; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Waters, 2011). While a negatively perceived school climate is associated with behavior problems, that may support a culture of victimisation, which has detrimental long-term effects on mental health (Cornell, Shukla, & Konold, 2015; Ferrás & Selman, 2014; Kutsyuruba, Klinger, & Hussain, 2015; Wang, Selman, Dishion, & Stormshak, 2010). A positive school climate based on social, emotional, and physical support and safety is related to academic success, student health,

the prevention of violence, and positive psychosocial adjustment (Cohen, McCabe, Michelli, & Pickeral, 2009; Haynes, Emmons, & Ben-Avie, 1997; Thapa, Cohen, Guffey, & Higgins-D'Alessandro, 2013).

Student Well-Being and Flourishing

Positive psychology focuses on the development of well-being with the goal to achieve flourishing. Flourishing is defined as living “within an optimal range of human functioning, one that connotes goodness, generativity, growth, and resilience” (Fredrickson & Losada, 2005, p. 1). Positive psychology highlights the need to focus on the promotion of student well-being, rather than a focus on the presence or absence of a condition (Donovan et al., 2003). In schools, the positive education movement applies positive psychology research to promote student well-being (Green & Norrish, 2013; Kristjánsson, 2012; Oades, Steger, Fave, & Passmore, 2017; Seligman, 2011). Positive education approaches may be either explicit programs or implicit practices that aim to increase positive emotions, individual strengths, and resilience. Positive education interventions have been increasingly associated with positive social, emotional, and academic outcomes (Durlak et al., 2011; Shoshani & Steinmetz, 2014; Waters, 2011; Zhang, 2016). For example, a meta-analysis of over 200 social and emotional learning (SEL) programs revealed that there was an 11% improvement in student’s academic performance compared with students not attending a SEL program (Durlak et al., 2011). Despite these findings, there is limited empirical basis in the literature to understand how and why positive interventions achieve these beneficial outcomes (Ciarrochi, Atkins, Hayes, Sahdra, & Parker, 2016).

The current study seeks to measure student well-being according to Seligman’s (2011) well-being theory. Well-being theory (Seligman, 2011) consists of five measurable elements that make-up the mnemonic PERMA:

- Positive emotions are one’s subjective feelings of happiness in the present moment; such as joy, excitement, and contentment.
- Engagement represents one’s intense involvement, concentration, or interest in life’s activities.
- Relationships represent an individual’s perception of their connection to others, including their feelings of being supported and cared for by others.
- Meaning represents an individual’s perception of a sense of purpose and a valuable and worthwhile life.
- Accomplishment refers to an individual’s persistent or determined pursuit of and desire for success and accomplishment.

The PERMA elements demonstrate independent empirical support to predict individual well-being and flourishing (Coffey, Wray-Lake, Mashek, & Branard, 2016; Seligman, 2011). While empirical validity and longitudinal stability of the PERMA model of well-being has been demonstrated in college and community samples (Coffey et al., 2016) there is only one study that has developed and utilised the PERMA elements to investigate student well-being in adolescents (Kern, Waters, Adler, & White, 2015).

Invitational Education

Invitational Education is a whole school approach that aims to address school climate and has been supported as a method to increase student well-being (Ng & Yuen, 2011; Purkey & Novak, 2016). The invitational education approach is based on Invitational Theory and Practice (ITP), an education practice model that focuses on the systems that promote the intellectual, psychological, social, moral, and physical potential of individuals (Purkey & Novak, 2016). Invitational education is a humanist approach built upon Dewey's 'democratic ethos' (Dewey & Ratner, 1939; Evans, 2000), self-concept (Burton et al., 2011; Shaw, Siegel, & Schoenlein, 2013), and perceptual theory (Beck, 2011; Meichenbaum, 1977; Rogers, 1951). Invitational education contributes to the larger array of pedagogical strategies found in positive education by promoting inviting school climates with the goal of positively benefiting student well-being and achievement (Haigh, 2011; Smith, 2012; Smith, Gregory, & Turner, 2016; Welch & Smith, 2014).

In invitational education, the five areas of a school interact to establish an inviting school climate. When these areas are inviting in ways that are inclusive, collaborative, engaging, respectful, and optimistic they contribute to flourishing. According to ITP (Purkey & Novak, 2016), the five areas of a school are people, places, policies, programs, and processes:

- People are central to the quality of school climate as it is the people who determine the planning, development, and implementation of the other areas, such as relationships, interactions, and processes.
- Places refer to the quality of the physical settings in which interactions typically occur. Places can be representative of the school's policies, programs, processes, and people (Hobday-North & Smith, 2014).
- Policies are the rules, codes, and procedures, which inform the ongoing running and regulation of the school, such as student attendance and discipline policies. Policies reflect the policy-maker's views of students and the emphasis is on the communication of policies, their use, and how they are perceived.
- Programs are formal and informal organised curricula and extra-curricula activities. Programs that are inviting cater to a range of student needs and interests, and respect the growth and development of individuals.
- Processes are the daily operations of a school and behavior of the people. Processes are a pattern of actions that are directed towards a purpose.

ITP recognizes the importance of student perceptions for academic engagement and performance through promoting positive self-concept (Stanley & Purkey, 1994). Self-concept guides how individuals think and remember information about themselves, and influences our perceptions (Burton et al., 2011; Shaw et al., 2013). Positive self-concept in students has been associated with beneficial outcomes for student academic engagement and performance (Grobel & Schwarzer, 1982; Haynes et al., 1997; Hoge, Smit, & Hanson, 1990; Stanley & Purkey, 1994). Invitational education aims to teach positive self-concept through targeted actions that influence people to see themselves as "able, valuable, and responsible" (Purkey & Novak, 2016, p. 12). This is described as the educator adopting an inviting stance that is characterised by the assumptions of optimism, trust, respect, care, and intentionality (Purkey & Novak, 2016).

Invitational education as a framework for developing inviting schools has been adopted in schools internationally (Purkey & Novak, 2016; Smith, 2016). Qualitative studies of schools in Hong Kong adopting ITP have demonstrated improvement in student's academic performance (Ng & Yuen, 2011; Poon & Leung, 2010). However, additional empirical investigation of invitational education is required to support whether it is an effective educational approach to promote student

well-being (Carmen & Mantak, 2011; Ng & Yuen, 2011). ITP theory has been criticised by Fink (2013) who argues for the consideration of the political context of the school system. Politics is described as the sixth area of school climate, characterised by individuals acting politically through collaborative decision-making based on a vision of implementing change (Fink, 2013). To understand a total school system, there needs to be recognition of the relationships of power and the unique distinct culture of each school. This is because change cannot be enacted within a school without a consideration of the politics, which potentially undermine the success of the other five dimensions (Fink, 2013).

The School as a Positive Institution

The school as a positive institution is yet to be thoroughly investigated (Kristjánsson, 2012); however, the research literature warrants a greater investigation of the role of schools in promoting student well-being. The school plays a profound role in shaping young people's social and emotional development (Bronfenbrenner, 1979; McKenzie et al., 2017; Neal & Neal, 2013). For adolescents especially, most of their time is spent at school where their relationships outside the family are a source of increasing reliance and support (Eccles et al., 1993; Erikson, 1963; Gerard & Booth, 2015; Newman & Newman, 2015; Shochet, Dadds, Ham, & Montague, 2006). These relationships at school with school staff and peers are key to well-being and when positive may act as social buffer for those students who lack support in other environments (Buehler, Fletcher, Johnston, & Weymouth, 2015; Grover, Limber, & Boberiene, 2015; Hopson, Schiller, & Lawson, 2014). Positive teacher-student relationships are key to meeting student's academic and emotional needs (Graham, Powell, & Truscott, 2016; Kutsyruba et al., 2015; Osterman, 2000; Wiltz, 2008) and have been found to moderate negative perceptions of school (Berg & Aber, 2015). Furthermore, longitudinal data demonstrates that students with positive school engagement and relationships in early adolescence have decreased risk of mental health problems (including depression and anxiety) and substance use in later years (Bond et al., 2007).

The promotion of student well-being has occurred primarily through positive education approaches. Despite the increasing popularity of positive education, the movement risks being dismissed based on a lack of clear communication of the benefits of positive psychology, positive education, and well-being (Kristjánsson, 2012; White, 2016). In addition, the long-term efficacy of interventions within schools is difficult to maintain, as school staff are often overwhelmed with the responsibility to deliver a broad range of programs and activities to support students (Forman, Olin, Hoagwood, Crowe, & Saka, 2009; McKenzie et al., 2017). The viability of interventions for student well-being must appeal to schools' interests in positive academic outcomes, consider the unique culture of each school, and be realistic to implement in the long-term.

Aims of the Current Study

This study will investigate student perceptions of school climate, defined by an invitational education theory (Purkey & Novak, 2016), and student subjective well-being defined by tenets of positive psychology theory (Seligman, 2011). Previous research has not incorporated a positive psychology framework in conjunction with the invitational education approach. The invitational education approach offers a promising tool to develop an inviting whole school climate and to promote student well-being (Purkey & Novak, 2016).

Invitational education's foundations in perceptual and self-concept theories recognize the significance of student perceptions of their school climate for well-being. Well-being theory complements invitational education by providing a measurable definition and an optimistic perspective of student well-being (Seligman, 2011). In addition, well-being theory has been

recognized as a useful and practical framework for schools to target effectively positive education interventions to enhance student well-being to promote flourishing (Kern et al., 2015). The study proposes to investigate the following hypotheses:

1. Student's perception of school climate is positive and statistically significantly related to student's perception of well-being.
2. Student's perception of school climate and well-being will significantly (statistically) differ based on Gender and Year Level.

Methodology

Participants

The participants included 143 students from a large public high school in the state of New York. However, only 120 students completed the questionnaire satisfactorily, met the criteria of being at the school for two or more years, and were in Years 9-11. Statistical details of the relevant demographics are found in Table 1.

Table 1

Number of Participants by Gender, Year Level, Years at School, and Age

	Male (N=62; 51.7%)	Female (N=58; 48.3%)	Total (N=120)
<hr/>			
<u>Year Level</u>			
9	13 (21.0%)	8 (13.8%)	21 (17.5%)
10	26 (41.9%)	26 (44.8%)	52 (43.3%)
11	23 (37.1%)	24 (41.4%)	47 (39.2%)
<u>Years at School</u>			
2	15 (24.2%)	8 (13.8%)	23 (19.2%)
3	26 (41.9%)	27 (46.6%)	53 (44.2%)
4	21 (33.9%)	23 (39.7%)	44 (36.7%)
<u>Age</u>			
14	12 (19.4%)	5 (8.6%)	17 (14.2%)
15	21 (33.9%)	21 (36.2%)	42 (35.0%)
16	23 (37.1%)	30 (51.7%)	53 (44.2%)
17	6 (9.7%)	2 (3.4%)	8 (6.7%)

Measures

Personal Description Questionnaire (PDQ). A personal description questionnaire was completed to obtain information about the students' gender, age, year level, and duration at school.

The Inviting School Survey- Revised (ISS-R). The 50-item Inviting School Survey Revised (ISS-R), developed by Smith (2005, 2016) was used to measure school climate. The ISS-R is based on ITP, investigating students' perceptions of the invitingness of their school in the five areas of invitational school climate: People, Places, Processes, Policies, and Programs. Participants are asked to respond to each positively worded item using a 5-point Likert-type response (Strongly Agree, Agree, Undecided, Disagree, Strongly Disagree). The ISS-R produces a total composite score and five sub-scale scores of school invitational qualities. A high ISS-R score indicates the participant perceives the school climate to be more inviting. The ISS-R is based on the 100-item Inviting School Survey (Purkey & Fuller, 1995) and can be used with fourth grade students and above. The ISS-R demonstrates strong face and content validity aligned with ITP theory (Purkey & Novak, 2016). The ISS-R demonstrates reasonable internal consistency, evaluated by Cronbach's alpha coefficient and Guttman's split-half alpha coefficients (Smith, 2005). Refer to Appendix A for details of the ISS-R instrument.

The PERMA. The 34-item adapted PERMA, developed by Kern and colleagues (2015) was used to measure student well-being. The PERMA is based on well-being theory that is comprised of five well-being elements: positive emotion, engagement, positive relationships, meaning, and accomplishment (Seligman, 2011). The PERMA was developed on Australian male students aged between 13 and 18. Factor analyses retained four of the five PERMA elements; Positive Emotion, Engagement, Relationships, Accomplishment. The two sub-scales associated with ill-being (Anxiety and Depression) were excluded, as the purpose of the current study was to investigate well-being from a positive perspective. Participants were asked to respond to each item using a 5-point Likert-type response (Almost Always, Very Often, Often, Sometimes, Never). A high PERMA score indicates a high self-perception of well-being. Previous research has shown that the PERMA total scale and the four subscales demonstrate acceptable reliability (Kern et al., 2015). Refer to Appendix B for details of the PERMA instrument.

Procedure

Following ethical approval from the Australian Catholic University Human Research Ethics Committee and with the principal's approval, invitations to participate in the study were distributed to parents of participating students. Once informed consent had been received from parents of students, the researcher's representative introduced the self-report questionnaire package to students in class groups of approximately 20 students. Students completed an online web-based questionnaire package (Qualtrics, 2017) on their personal electronic devices (including laptops and tablets). The questionnaire package was expected to take approximately 30 minutes to complete. Participants were informed that all information they provided would remain confidential and that they had the right to withdraw from the study at any time.

Data Preparation and Analyses

All data analyses were conducted using the Statistical Package for the Social Sciences (SPSS), Version 25 (IBM Corp, 2017). No outliers were identified as requiring deletion. Missing values were replaced with the subscale mean for participants with less than five missing responses. To make comparative interpretations raw scores were converted to percentages as there were a different number of items loaded onto each subscale. Normality and homogeneity of variance assumptions were met. Descriptive analyses were conducted to generate means and standard

deviations for the variables of interest. Pearson correlational analyses were performed to investigate associations between variables of school climate, student well-being, and demographic data. Inferential statistics were used to investigate possible statistically significant differences between the subscales and total scales of school climate and well-being as measured by the ISS-R and PERMA. A Two-Way GLM Univariate ANOVA was conducted to investigate differences between the significant demographics (Gender and Year Level) and perceptions of school climate and student well-being. When the ANOVA indicated a significant effect of Year Level, post hoc paired-samples *t* tests were conducted to compare group means. As Year Level has three levels, the LSD method for control of Type I error for pairwise comparisons was utilised. The LSD procedure is a powerful method to control for Type I errors across all pairwise comparisons if a factor has three levels (Tabachnick & Fidell, 2013).

Results

Descriptive Analyses

Descriptive statistical analyses of the variables of interest (refer to Table 2) revealed that the PERMA mean total scale score was 64.53% (SD = 14.86%) for the total sample. PERMA subscale scores ranged from a low of 57.17% (SD = 15.10%) [Engagement subscale] to a high of 66.28% (SD = 17.69%) [Accomplishment subscale].

Student's ISS-R mean total scale score was 64.87% (SD = 9.92%). ISS-R subscale scores ranged from a low of 58.31% (SD = 12.60%) [Place subscale] to a high of 69.37% (SD = 11.18%) [Program subscale].

Reliability Analyses

The internal consistency of the PERMA and ISS-R total scales and subscales were investigated, results are presented in Table 3. The PERMA ($\alpha = .96$) and ISS-R ($\alpha = .94$) total scales had high reliabilities. Subscale alphas ranges from .66 (Program subscale) to a high of .95 (Positive Emotion subscale) indicating high internal consistency.

Correlational Analyses

Pearson correlational analyses were conducted to assess the simple bivariate relationships among the independent variables of well-being and school climate, results are presented in Table 3. There was a significant and positive relationship ($p < .001$) between the total ISS-R scale and the Total PERMA scale ($r = .58$). The total ISS-R scale was positive and significantly related ($p < .001$) with the Positive Emotions ($r = .52$), Relationships ($r = .49$), Engagement, ($r = .50$), and Accomplishment ($r = .49$) subscales of the PERMA. While, the Total PERMA scale was positive and significantly related ($p < .001$) with the People ($r = .56$), Program ($r = .46$), Process ($r = .56$), Policy ($r = .51$), and Place ($r = .47$) subscales of the ISS-R. Both instruments' subscales relationships, within and between, were statistically significant ($p < .001$).

Factor Analyses: Gender and Year Level

A Two-Way Univariate ANOVA was conducted to investigate if there were statistically significant differences in student perceptions of school climate and well-being based on the main factors of Gender and Student Year Level. The demographic variables of Age and Duration at School were not analyzed as these were statistically significant and positively related to Year Level in the sample.

Table 2

Descriptive Statistics for PERMA Total Scale, ISS-R Total Scale, and Subscales by Gender by Year Level

SCALE	GENDER	YEAR LEVEL	Mean	Std. Deviation	N
TOTAL PERMA	Male	Year 9	69.37%	13.60%	13
		Year 10	66.95%	17.21%	26
		Year 11	67.39%	14.08%	23
		Total	67.62%	15.17%	62
	Female	Year 9	60.88%	12.98%	8
		Year 10	64.14%	14.80%	26
		Year 11	58.21%	13.04%	24
		Total	61.24%	13.89%	58
	Total	Year 9	66.13%	13.70%	21
		Year 10	65.54%	15.95%	52
		Year 11	62.70%	14.19%	47
		Total	64.53%	14.86%	120
POSITIVE EMOTION	Male	Year 9	69.47%	16.24%	13
		Year 10	65.33%	20.62%	26
		Year 11	66.69%	16.39%	23
		Total	66.70%	18.04%	62
	Female	Year 9	61.54%	16.36%	8
		Year 10	55.98%	17.01%	26
		Year 11	54.87%	14.64%	24
		Total	56.29%	15.84%	58
	Total	Year 9	66.45%	16.36%	21
		Year 10	60.65%	19.30%	52
		Year 11	60.65%	16.47%	47
		Total	61.67%	17.73%	120
ENGAGEMENT	Male	Year 9	62.31%	17.29%	13
		Year 10	56.92%	15.55%	26
		Year 11	63.04%	15.86%	23
		Total	60.32%	16.03%	62
	Female	Year 9	52.92%	7.65%	8
		Year 10	55.77%	14.74%	26
		Year 11	51.94%	13.44%	24
		Total	53.79%	13.37%	58
	Total	Year 9	58.73%	14.89%	21
		Year 10	56.35%	15.01%	52
		Year 11	57.38%	15.56%	47
		Total	57.17%	15.10%	120
RELATIONSHIPS	Male	Year 9	76.24%	10.63%	13
		Year 10	75.30%	18.81%	26
		Year 11	71.98%	13.89%	23
		Total	74.27%	15.49%	62
	Female	Year 9	68.33%	18.43%	8
		Year 10	76.75%	17.94%	26
		Year 11	64.35%	16.57%	24
		Total	70.46%	18.11%	58
	Total	Year 9	73.23%	14.22%	21
		Year 10	76.03%	18.21%	52
		Year 11	68.09%	15.63%	47
		Total	72.43%	16.85%	120
ACCOMPLISHMENT	Male	Year 9	65.90%	16.45%	13
		Year 10	67.95%	19.32%	26
		Year 11	66.38%	15.47%	23
		Total	66.94%	17.13%	62
	Female	Year 9	56.25%	12.90%	8
		Year 10	71.28%	19.12%	26
		Year 11	62.50%	17.70%	24
		Total	65.57%	18.39%	58
	Total	Year 9	62.22%	15.61%	21
		Year 10	69.62%	19.10%	52
		Year 11	64.40%	16.58%	47
		Total	66.28%	17.69%	120

Table 2 continued

SCALE	GENDER	YEAR LEVEL	Mean	Std. Deviation	N
TOTAL ISS-R	Male	Year 9	68.22%	9.51%	13
		Year 10	66.10%	8.59%	26
		Year 11	65.77%	11.18%	23
		Total	66.42%	9.69%	62
	Female	Year 9	67.59%	7.33%	8
		Year 10	64.75%	11.57%	26
		Year 11	60.08%	8.03%	24
		Total	63.20%	9.96%	58
	Total	Year 9	67.98%	8.55%	21
		Year 10	65.42%	10.11%	52
		Year 11	62.86%	10.02%	47
		Total	64.87%	9.92%	120
PEOPLE	Male	Year 9	72.40%	9.66%	13
		Year 10	69.69%	9.78%	26
		Year 11	69.62%	12.56%	23
		Total	70.23%	10.76%	62
	Female	Year 9	72.31%	6.12%	8
		Year 10	67.21%	11.47%	26
		Year 11	64.46%	8.77%	24
		Total	66.78%	10.00%	58
	Total	Year 9	72.37%	8.31%	21
		Year 10	68.45%	10.63%	52
		Year 11	66.98%	10.99%	47
		Total	68.56%	10.50%	120
PROGRAM	Male	Year 9	71.17%	10.55%	13
		Year 10	70.88%	7.88%	26
		Year 11	69.09%	13.58%	23
		Total	70.28%	10.71%	62
	Female	Year 9	67.14%	8.22%	8
		Year 10	70.70%	13.57%	26
		Year 11	66.31%	10.28%	24
		Total	68.39%	11.67%	58
	Total	Year 9	69.64%	9.72%	21
		Year 10	70.79%	10.99%	52
		Year 11	67.67%	11.96%	47
		Total	69.37%	11.18%	120
PROCESS	Male	Year 9	66.92%	13.70%	13
		Year 10	65.85%	11.40%	26
		Year 11	68.96%	11.24%	23
		Total	67.23%	11.74%	62
	Female	Year 9	68.30%	12.08%	8
		Year 10	66.83%	12.86%	26
		Year 11	59.58%	9.52%	24
		Total	64.03%	11.89%	58
	Total	Year 9	67.45%	12.81%	21
		Year 10	66.34%	12.04%	52
		Year 11	64.17%	11.32%	47
		Total	65.68%	11.87%	120
POLICY	Male	Year 9	63.52%	7.66%	13
		Year 10	62.55%	9.45%	26
		Year 11	62.73%	11.08%	23
		Total	62.82%	9.62%	62
	Female	Year 9	65.00%	8.33%	8
		Year 10	63.63%	10.37%	26
		Year 11	58.27%	8.60%	24
		Total	61.60%	9.68%	58
	Total	Year 9	64.08%	7.75%	21
		Year 10	63.09%	9.84%	52
		Year 11	60.46%	10.04%	47
		Total	62.23%	9.63%	120
PLACE	Male	Year 9	64.55%	11.51%	13
		Year 10	60.76%	11.24%	26
		Year 11	58.33%	11.66%	23
		Total	60.65%	11.49%	62
	Female	Year 9	62.58%	9.41%	8
		Year 10	57.25%	15.68%	26
		Year 11	51.98%	10.64%	24
		Total	55.80%	13.34%	58
	Total	Year 9	63.80%	10.56%	21
		Year 10	59.00%	13.62%	52
		Year 11	55.09%	11.49%	47
		Total	58.31%	12.60%	120

Table 3

Cronbach's Alpha Reliability Coefficient (α) and Pearson Correlation Matrix for the ISS-R Total Scale, PERMA Total Scale, and Subscales (N= 120)

Scale	α	2	3	4	5	6	7	8	9	10	11
1. Total ISS-R Scale (# of items= 50)	.94	----	----	----	----	----	.58	.52	.49	.50	.49
2. People (# of items = 16)	.85	—	.77	.79	.73	.73	.56	.51	.48	.48	.46
3. Program (# of items = 7)	.66	—	—	.74	.67	.65	.46	.41	.38	.38	.41
4. Process (# of items = 8)	.73	—	—	—	.73	.71	.56	.49	.49	.46	.51
5. Policy (# of items = 7)	.67	—	—	—	—	.63	.51	.40	.39	.49	.52
6. Place (# of items = 12)	.86	—	—	—	—	—	.47	.45	.39	.41	.34
7. Total PERMA Scale (# of items = 34)	.96	—	—	—	—	—	—	—	—	—	—
8. Positive Emotion (# of items = 13)	.95	—	—	—	—	—	—	—	.74	.73	.62
9. Engagement (# of items = 6)	.73	—	—	—	—	—	—	—	—	.61	.58
10. Relationships (# of items = 9)	.90	—	—	—	—	—	—	—	—	—	.60
11. Accomplishment (# of items = 6)	.86	—	—	—	—	—	—	—	—	—	—

Note: All Pearson correlation coefficients are statistically significant, $p < .001$

Table 4 presents the results of the Two-Way ANOVAs with effect size estimates (partial eta-squared - η_p^2) and power estimates.

Table 4

ISS-R Total Scale, PERMA Total Scale, and Subscales Univariate Analysis of Variance Summary for the Main Effects (Gender and Year Level)^a

Scale	F^b	p	η_p^2	Power
<u>ISS-R Total</u>				
Gender	1.698	.195	.015	.253
Year Level	1.973	.144	.033	.401
<u>People</u>				
Gender	1.522	.220	.013	.231
Year Level	1.831	.165	.031	.375
<u>Program</u>				
Gender	1.059	.306	.009	.175
Year Level	0.930	.397	.016	.208
<u>Process</u>				
Gender	0.995	.321	.009	.167
Year Level	0.696	.501	.012	.165
<u>Policy</u>				
Gender	0.107	.744	.001	.062
Year Level	1.407	.249	.024	.297
<u>Place</u>				
Gender	2.565	.112	.022	.355
Year Level	3.460	.035*	.057	.638
<u>PERMA Total</u>				
Gender	5.346	.023*	.045	.630
Year Level	0.461	.632	.008	.124
<u>Positive Emotion</u>				
Gender	7.857	.006**	.064	.794
Year Level	0.641	.529	.011	.155
<u>Engagement</u>				
Gender	5.832	.017*	.049	.668
Year Level	0.093	.911	.002	.064
<u>Relationships</u>				
Gender	1.992	.161	.017	.288
Year Level	2.787	.066	.047	.539
<u>Accomplishment</u>				
Gender	0.920	.339	.008	.158
Year Level	2.052	.133	.034	.415

^a There were no statistical significant 2-Way interaction effects ($p > .05$)

^b Gender $df = 1, 114$ Year Level $df = 2, 114$.

* $p < .05$; ** $p < .01$.

There were no statistical significant two-way interaction effects (Gender by Year Level, $p > .05$). The univariate ISS-R scales F -tests revealed that there was no significant Gender difference but there was one significant Year Level scale difference, namely the Place subscale. Post Hoc analysis of pairwise differences (using the LSD procedure to control for Type I errors) identified that Year 9 students perceived Place significantly higher than Year 11 students (63.80% versus 55.09%). As depicted in Table 4 the strength of relationship between Year Level and the Place subscale, as assessed by η_p^2 , was large, with the Year Level factor accounting for 5.7% of the variance of the dependent variable (Cohen, 1988).

However, there were no statistically significant Year level differences on the PERMA scales, but there were three significant PERMA scale differences between Gender (PERMA Total, Positive Emotion, and Engagement). As depicted in Table 2 Males scored significantly higher than Females on the PERMA scales: PERMA Total: 67.62% vs 61.24%; Positive Emotion: 66.70% vs 56.29%; and Engagement: 60.32% vs 53.79%.

As shown in Table 4 the strength of relationship between Gender and the three scales as assessed by η_p^2 , was large, with the Gender factor accounting for 4.5%, 6.4%, and 4.9% respectively of the variance of the dependent variable (Cohen, 1988).

Discussion

Hypothesis 1: Student's perception of school climate is significantly related to student perception of well-being.

The present study provided strong support for the hypothesis that student perceptions of school climate are statistically significant and positively related to student perceptions of well-being. Additionally, within the current sample, there were differences in student's well-being in areas of positive emotions, relationships, engagement, and accomplishment. For example, students within this school rated their experience of relationships higher than other areas of well-being. While, student perceptions of school climate in the sample were relatively consistent across the school areas of people, places, process, programs, and policies. However, People subscale was rated highest in the ISS-R subscales. These results suggest that further research is required to understand the complexity of the school climate and well-being measures relationships.

Student's overall perceptions of a positive and inviting school climate were significantly related to student's positive ratings of positive emotions, relationships, engagement, and accomplishment. While, student's overall self-rated well-being was significantly related to the areas of school climate, including people, programs, places, processes, and policies. The findings are consistent with research that suggests that there is a bidirectional relationship between school climate and student well-being (Cohen, 2006). The relationship found between student self-perceptions of school climate and well-being indicates that students who report positive emotions, positive relationships, engagement, and a desire for accomplishment are more likely to attend a positive and inviting school. The findings support research that associates student perceptions of a positive school climate with positive psychological well-being and academic engagement (Berg & Aber, 2015; Durlak et al., 2011; Waters, 2011; Zhang, 2016).

The importance of positive interactions and relationships were supported in the results as a significant factor contributing to the quality of school climate, consistent with ITP (Purkey & Novak, 2016; Smith et al., 2016). A significant relationship was found between relationships and people in student self-perceptions of school climate and subjective well-being. These results suggest that perceptions of positive and meaningful relationships are associated with positive and

inviting interactions with people within the school environment. This is consistent with research that emphasises the importance of positive relationships within the school for student well-being (Graham, Powell, & Truscott, 2016; Kutsyuruba et al., 2015).

Upon closer investigation, elements of student well-being including positive emotions, relationships, and engagement were significantly related to all of the areas of school climate as defined by Invitational Education Theory.

It is noted that the school climate areas of policies and processes had low internal consistency which suggests that student's responses to these areas were inconsistent. It is suggested that this may be because processes and policies within a school are less directly observable to students than the other areas assessed by school climate. The low reliability of the subscales may also be due to inconsistent responses, diversity of the constructs, or the reduced number of items on the scale (Cortina, 1993).

Hypothesis 2: Student's perception of school climate and well-being will differ based on Gender and Year Level.

The hypothesis that student's perception of school climate and subjective well-being will differ based on Gender and Year Level was not totally supported by the current study.

Only one ISS-R subscale was mediated by Year Level, Place, while the Total PERMA scale and two of the subscales (Positive Emotion and Engagement) were mediated by Gender.

The difference between the Year Levels on one aspect of school climate can be the result of a range of reasons (e.g. real differences between facilities for Year 9 versus Year 11 students) it probably requires a focus group of students to determine why this perception exists. However, this difference did not have a significant impact on the total perception of school climate

The Gender differences are a bit more problematic and requires further research in understanding why gender is moderating, not only the Total PERMA score but two of the four subscales. While there is a vast knowledge of gender differences in subjective well-being there is still a lack of consensus why this is so. When attempting to explain gender differences in subjective well-being there are several themes that emerge from the literature, including structural factors (i.e., differences in institutional arrangement and opportunities between boys and girls) socio-cultural factors (i.e., differences in societal expectations and norms for boys and girls, and biological differences (i.e., physical and physiological differences) (Fujita, Diener, & Sandvik, 1991; Russo & Green, 1993; Tesch-Römer, Motel-Klingebiel, & Tomasik, 2008; Wood, Rhodes, & Whelan, 1989).

While the question of whether boys and girls differ in levels of well-being is a seemingly straight-forward one, there are numerous complexities involved in answering it. First, it is important to consider the different types, and components, of well-being as a construct. Second, it is important to understand that depending on numerous biological, individual, and environmental factors the difference in subjective well-being may be more or less apparent. Third, one must consider the present limitations in the research and act on the necessary future directions to provide further clarity and understanding (Batz & Tay, 2018; Froh, Yurkewicz, & Kashdan, 2009).

Research Limitations

The study has a limited scope and focused approach towards evaluating school climate according to ITP and Positive Psychology well-being theory (PERMA). It is acknowledged that there are many factors supported in the research literature that interrelate to influence student's perceptions of climate; such as school-level and individual-level factors (Kutsyuruba et al., 2015).

The sample was small and convenience-based, which limits both the findings and their generalisability. The sample was delimited to students at secondary level from Years 9 to 11. In addition, students must have attended the school for a minimum of two years; this was to ensure that students were familiar with the school climate. A further limitation was the use of self-report methodology, which poses a threat to internal validity based on social desirability bias and the student's level of motivation.

Conclusion and Future Direction

The findings support the use of the invitational education approach and well-being theory as a methodological framework to evaluate the whole school climate and student well-being. This framework does not require extensive training or resources and can be used to measure, monitor, and evaluate a school's climate and identify areas for improvement for the benefit of student well-being. Such a framework has the potential to enable schools to effectively target initiatives, as well as improve the state of the research in the areas of school climate and positive education. This could contribute to professional knowledge regarding what elements of school climate are essential for fostering and supporting positive outcomes and well-being in students.

Further research with a larger sample is recommended to understand the relationships between student well-being and perceptions of school climate and to determine if there are gender, age, and duration at school differences. Additionally, further research is required that investigates the relationship between these and academic performance to strengthen the argument for the implementation of positive education approaches in schools.

Acknowledging the political context of a school and appealing to key educational stakeholder's interests in the academic performance of students will support policy changes (Fink, 2013; McKenzie et al., 2017). It is hoped that further research should expand the evidence evaluating the impact of whole-school positive education approaches on student well-being.

Additionally, further research is required to extend understanding of how student perceptions of school climate, based on their individual characteristics and experiences, may influence such students' perception of well-being (Fan et al., 2011; Koth et al., 2008). Given the limitation of the present research, it was not possible to investigate the potential of a moderating relationship between student perceptions of positive relationships and school climate (Berg & Aber, 2015).

The current study extends the wealth of school climate research to demonstrate the importance of understanding student self-perceptions' of school climate. Indeed, student's perceptions determine their behavior and as a result are a more reliable indicator of outcomes rather than objective accounts of school climate (Bandura, 1986, 2001; Fan et al., 2011; Koth et al., 2008; Purkey & Novak, 2016). A significant relationship exists between student self-perceptions' of well-being and school climate, which emphasises the importance of understanding student's perceptions for improving well-being. It is prudent given the high incidence of mental health disorders in young people (ABS, 2007; Lawrence et al., 2015) for education's focus to broaden to promoting positive school environments that support holistic development and education for students. Invitational education and positive psychology together promote inviting school climates for the benefit of student well-being that supports young people not only to have satisfactory mental health and well-being, but also to flourish in life.

A most interesting question to investigate is that which has confounded self-concept and academic achievement research. As we have very strong support for the relationship between self-perceptions of well-being and school climate, what is the temporal ordering? Does perception of

school climate affect perception of well-being? Alternatively, does perception of well-being impact on the perception of the school climate? For both questions, what are the significant mediating factors?

References

- Aldridge, J.M., Fraser, B.J., Fozdar, F., Ala'i, K., Earnest, J., & Afari, E. (2016). Students' perceptions of school climate as determinants of wellbeing, resilience and identity. *Improving Schools, 19*, 5-26. doi: 10.1177/1365480215612616
- Australian Bureau of Statistics. (2007). *Mental health of young people*. Canberra: ABS.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52*, 1-26. doi: 10.1146/annurev.psych.52.1.1
- Batz, C., & Tay, L. (2018). Gender differences in subjective well-being. In E. Diener, S. Oishi, & L. Tay (Eds.). *Handbook of well-being*. Salt Lake City, UT: DEF. doi: nobascholar.com
- Beck, J. (2011). *Cognitive-behavior therapy: Basics and beyond* (2nd ed.). New York, NY: Guilford Publications.
- Berg, J.K., & Aber, J.L. (2015). A multilevel view of predictors of children's perceptions of school interpersonal climate. *Journal of Educational Psychology, 107*, 1150-1170. doi: 10.1037/edu0000027
- Bond, L., Butler, H., Thomas, L., Carlin, J., Glover, S., Bowes, G., & Patton, G. (2007). Social and school connectedness in early secondary school as predictors of late teenage substance use, mental health, and academic outcomes. *Journal of Adolescent Health, 40*, 9-18. doi:10.1016/j.jadohealth.2006.10.013
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. London, England: Harvard University Press.
- Buehler, C., Fletcher, A. C., Johnston, C., & Weymouth, B. B. (2015). Perceptions of school experiences during the first semester of middle school. *School Community Journal, 25*, 55-83. Retrieved from <http://www.schoolcommunitynetwork.org/>
- Burton, L., Westen, D., & Kowalski, R. (2011). *Psychology* (4th ed.). Milton, QLD: Wiley.
- Carmen, K. M. N., & Mantak, Y. (2011). The perceived school climate in invitational schools in Hong Kong: Using the Chinese version of the Inviting School Survey-Revised (ISS-R). *Journal of Invitational Theory & Practice, 17*, 11-21. Retrieved from <https://www.invitationaleducation.net/>

- Ciarrochi, J., Atkins, P.W.B., Hayes, L.L., Sahdra, B.K., & Parker, P. (2016). Contextual positive psychology: Policy recommendations for implementing positive psychology in schools. *Frontiers in Psychology*, 7(1561). doi: 10.3389/fpsyg.2016.01561
- Coffey, J.K., Wray-Lake, L., Mashek, D., & Branard, B. (2016). A multi-study examination of well-being theory in college and community samples. *Journal of Happiness Studies*, 17, 187-211. doi: 10.1007/s10902-014-9590-8
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Cohen, J. (2006). Social, emotional, ethical, and academic education: Creating a climate for learning, participation in democracy, and well-being. *Harvard Educational Review*, 76, 201-237. doi: 10.17763/haer.76.2.j44854x1524644vn
- Cohen, J., McCabe, L., Michelli, N. M., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers College Record*, 111, 180-213. Retrieved from <https://www.tcrecord.org>
- Cornell, D., Shukla, K., & Konold, T. (2015). Peer victimization and authoritative school climate: A multilevel approach. *Journal of Educational Psychology*, 107, 1186-1201. doi:10.1037/edu0000038
- Cortina, J.M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology*, 78, 98-104. doi: 10.1037/0021-9010.78.1.98
- Dewey, J. & Ratner, J. (1939). *Intelligence in the modern world: John Dewey's philosophy*. New York, NY: Modern Library.
- Donovan, R.J., Watson, N., Henley, N., Williams, A., Silburn, S., Zubrick, S., ... Roberts, C, (2003). *Report to Heathway: Mental health promotion scoping project*. Perth: Centre for Developmental Health, Curtin University.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82, 405-432. doi:10.1111/j.1467-8624.2010.01564.x
- Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C., & MacIver, D. (1993). Development during adolescence: The impact of stage-environment fit on young adolescents' experiences in schools and in families. *American Psychologist*, 48, 90-101. doi:10.1037/0003-066X.48.2.90
- Erikson, E.H. (1963). *Childhood and society* (2nd ed.). New York, NY: Norton.
- Evans, K. G. (2000). Reclaiming John Dewey: Democracy, inquiry, pragmatism, and public management. *Administration & Society*, 32, 308-328. doi: 10.1177/00953990022019452

- Fan, W., Williams, C. M., & Corkin, D. M. (2011). A multilevel analysis of student perceptions of school climate: The effect of social and academic risk factors. *Psychology in the Schools*, 48, 632-647. doi:10.1002/pits.20579
- Ferrás, S. D., & Selman, R. (2014). How students' perceptions of the school climate influence their choice to upstand, bystand, or join perpetrators of bullying. *Harvard Educational Review*, 84, 162-187. doi:10.17763/haer.84.2.h488313410l651mm
- Fink, D. (2013). The sixth "P"- politics. *Journal of Invitational Theory & Practice*, 19, 45-51. Retrieved from <https://www.invitationaleducation.net/>
- Forman, S. G., Olin, S. S., Hoagwood, K. E., Crowe, M., & Saka, N. (2009). Evidence-based interventions in schools: Developers' views of implementation barriers and facilitators. *School Mental Health*, 1(1), 26-36. doi:10.1007/s12310-008-9002-5.
- Fredrickson, B. L., & Losada, M. F. (2005). Positive affect and the complex dynamics of human flourishing. *American psychologist*, 60, 678-686. doi: 10.1037/0003-066X.60.7.678
- Froh, J., Yurkewicz, C., & Kashdan (2009). Gratitude and subjective well-being in early adolescence: Examining gender differences. *Journal of Adolescence*, 32(3), 633-650. doi: <https://doi.org/10.1016/j.adolescence.2008.06.006>
- Fujita, F., Diener, E., & Sandvik, E. (1991). Gender differences in negative affect and well-being: The case for emotional intensity. *Journal of Personality and Social Psychology*, 61(3), 427-434. doi: <http://dx.doi.org/10.1037/0022-3514.61.3.427>
- Gerard, J. M., & Booth, M. Z. (2015). Family and school influences on adolescents' adjustment: The moderating role of youth hopefulness and aspirations for the future. *Journal of Adolescence*, 44, 1-16. doi:10.1016/j.adolescence.2015.06.003
- Graham, A., Powell, M. A., & Truscott, J. (2016). Facilitating student well-being: Relationships do matter. *Educational Research*, 58, 366-383. doi:10.1080/00131881.2016.1228841
- Green, L. S., & Norrish, J. M. (2013). Enhancing well-being in adolescents: Positive psychology and coaching psychology interventions in schools. In C. Proctor, P. A. Linley, C. Proctor, & P. A. Linley (Eds.), *Research, applications, and interventions for children and adolescents: A positive psychology perspective* (pp. 211-222). New York, NY: Springer.
- Grobel, J., & Schwarzer, R. (1982). Social comparison, expectations and emotional reactions in the classroom. *School Psychology International*, 3, 49-55. doi: 10.1177/0143034382031008
- Grover, H. M., Limber, S. P., & Boberiene, L. V. (2015). Does it matter if students experience school as a place of community? *American Journal of Orthopsychiatry*, 85, S79-S85. doi:10.1037/ort0000131
- Haigh, M. (2011). Invitational education: Theory, research and practice. *Journal of Geography in Higher Education*, 35, 299-309. doi:10.1080/03098265.2011.554115

- Haynes, N. M., Emmons, C., & Ben-Avie, M. (1997). School climate as a factor in student adjustment and achievement. *Journal of Educational and Psychological Consultation*, 8, 321-329. doi:10.1207/s1532768xjepc0803_4
- Hobday-North, S., & Smith, K. (2014). Improving school climate: The essential role of 'place' in invitational theory and practice. *Learning and Teaching*, 7, 23-32. doi:10.7459/lt/7.2.03
- Hoge, D.R., Smit, E.K., & Hanson, S.L. (1990). School experiences predicting changes in self-esteem of sixth and seventh-grade students. *Journal of Educational Psychology*, 82, 117-127. doi: 10.1037/0022-0663.82.1.117
- Hopson, L. M., Schiller, K. S., & Lawson, H. A. (2014). Exploring linkages between school climate, behavioral norms, social supports, and academic success. *Social Work Research*, 38, 197-209. doi:10.1093/swr/svu017
- IBM Corp. (2017). IBM SPSS statistics for windows (Version 25.0) [Computer software]. Armonk, NY: Author.
- Kern, M. L., Waters, L. E., Adler, A., & White, M. A. (2015). A multidimensional approach to measuring well-being in students: Application of the PERMA framework. *The Journal of Positive Psychology*, 10, 262-271. doi:10.1080/17439760.2014.936962
- Koth, C. W., Bradshaw, C. P., & Leaf, P. J. (2008). A multilevel study of predictors of student perceptions of school climate: The effect of classroom-level factors. *Journal of Educational Psychology*, 100, 96-104. doi:10.1037/0022-0663.100.1.96
- Kristjánsson, K. (2012). Positive psychology and positive education: Old wine in new bottles? *Educational Psychologist*, 47, 86-105. doi:10.1080/00461520.2011.610678
- Kutsyruba, B., Klinger, D. A., & Hussain, A. (2015). Relationships among school climate, school safety, and student achievement and well-being: A review of the literature. *Review of Education*, 3, 103-135. doi:10.1002/rev3.3043
- Lawrence, D., Johnson, S., Hafekost, J., Boterhoven De Haan, K., Sawyer, M., Ainley, J., & Zubrick, S. R. (2015). *The mental health of children and adolescents: Report on the second Australian child and adolescent survey on mental health and wellbeing*. Canberra, NSW: Australian Government.
- McKenzie, V., Vidair, H.B., Eacott, C., & Sauro, D. (2017). Student mental health and psychological interventions in a school setting. In M. Thielking & M.D. Terjesen (Eds.), *Handbook of Australian school psychology: Integrating international research, practice, and policy* (pp. 235-249). Switzerland: Springer.
- Meichenbaum, D. (1977). Cognitive behavior modification. *Cognitive Behavior Therapy*, 6, 185-192. doi: 10.1080/16506073.1977.9626708

- Mitchell, M. M., Bradshaw, C. P., & Leaf, P. J. (2010). Student and teacher perceptions of school climate: A multilevel exploration of patterns of discrepancy. *Journal of School Health, 80*, 271-279. doi:10.1111/j.1746-1561.2010.00501.x
- Neal, J.W., & Neal, Z.P. (2013). Nested or networked? Future directions for ecological systems theory. *Social Development, 22*, 722-737. doi: 10.1111/sode.12018
- Newman, B.M., & Newman, P.R. (2015). *Development through life: A psychosocial approach* (12th ed.). Stamford, CT: Cengage Learning.
- Ng, C. K. M., & Yuen, M. (2011). The perceived school climate in invitational schools in Hong Kong: using the Chinese version of the Inviting School Survey-Revised (ISS-R). *Journal of Invitational Theory and Practice, 17*, 11-21. Retrieved from <https://www.invitationaleducation.net/>
- Oades, L. G., Steger, M. F., Fave, A. D., & Passmore, J. (2017). The psychology of positivity and strengths-based approaches at work. In L.G. Oades, M.F. Steger, A.D. Fave, and J. Passmore (Eds.), *The Wiley Blackwell handbook of the psychology of positivity and strengths-based approaches at work* (pp. 1-8). Oxford, OX: John Wiley & Sons.
- Osterman, K. F. (2000). Students' need for belonging in the school community. *Review of Educational Research, 70*(3), 323-367. doi:10.3102/00346543070003323
- Poon, K., & Leung, G. (2010). *Exploring a group of students' school experiences in a secondary school: A case study in the implementation of invitational education in Hong Kong* (Doctoral thesis, University of Durham, Durham, England). Retrieved from <http://etheses.dur.ac.uk/221/>
- Purkey, W., & Fuller J. (1995). *The inviting school survey (ISS) user's manual*. Greensboro, NC: The University of North Carolina.
- Purkey, W., & Novak, J. (2016). *Fundamentals of invitational education* (2nd ed.). Kennesaw, GA: International Alliance for Invitational Education.
- Qualtrics. (2017). Qualtrics online survey software (Version September 2017) [Computer software]. Provo, UT: Author.
- Rogers, C.R. (1951). *Client-centered therapy*. Boston, MA: Houghton-Mifflin.
- Russo, N. F., & Green, B. L. (1993). Women and mental health. In F.L. Denmark & M. A. Paludi (Eds.) *Psychology of women: A handbook of issues and theories* (pp. 379-436). Westport, CT: Greenwood.
- Seligman, M. (2011). *Flourish*. New York, NY: Free Press.

- Shaw, D. E., Siegel, B. L., & Schoenlein, A. (2013). The basic tenets of invitational theory and practice: An invitational glossary. *Journal of Invitational Theory & Practice*, 19, 30-42. Retrieved from <https://www.invitationaleducation.net/>
- Shochet, I. M., Dadds, M. R., Ham, D., & Montague, R. (2006). School connectedness is an underemphasized parameter in adolescent mental health: Results of a community prediction study. *Journal of Clinical Child and Adolescent Psychology*, 35, 170-179. doi:10.1207/s15374424jccp3502_1
- Shoshani, A., & Steinmetz, S. (2014). Positive psychology at school: A school-based intervention to promote adolescents' mental health and well-being. *Journal of Happiness Studies*, 15, 1289-1311. doi:10.1007/s10902-013-9476-1
- Smith, K. (2005). The inviting school survey-revised (ISS-R): A survey for measuring the invitational qualities (I.Q.) of the total school climate. *Journal of Invitational Theory & Practice*, 11, 35-53. Retrieved from <https://www.invitationaleducation.net/>
- Smith, K. (2012). The history and development of the inviting school survey: 1995-2012. *Journal of Invitation Theory and Practice*, 18, 57-64. Retrieved from <https://www.invitationaleducation.net/>
- Smith, K. (2016). *Manual for the Inviting School Survey (ISS-R): A survey for measuring the invitational qualities (I.Q.) of the total school climate* (4th ed.). Kennesaw, GA: International Alliance for Invitational Education.
- Smith, K., Gregory, S.T., & Turner, T. (2016). The climate and culture of invitational higher education and the inviting higher education survey (IHES). In S.T. Gregory & J. Edwards (Eds.), *Invitational education and practice in higher education: An international perspective* (pp. 299-322). New York, NY: Lexington Books.
- Stanley, P.H., & Purkey, N. (1994). Student self-concept as learner: Does Invitational Education make a difference? *Research in the Schools*, 1, 15-27. Retrieved from <http://www.msra.org/publications-rits.html>
- Tabachnick, B., & Fidell, L. (2013). *Using multivariate statistics* (6th ed.). Boston, MA: Pearson.
- Tesch-Römer, C., Motel-Klingebiel, A., & Tomasik, M. J. (2008). Gender differences in subjective wellbeing: Comparing societies with respect to gender equality. *Social Indicators Research*, 85(2), 329-349. doi: <https://doi.org/10.1007/s11205-007-9133-3>
- Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school climate research. *Review of Educational Research*, 83, 357-385. doi:10.3102/0034654313483907
- Voight, A., & Nation, M. (2016). Practices for improving secondary school climate: A systematic review of the research literature. *American Journal of Community Psychology*, 58, 1-18. doi:10.1002/ajcp.12074

- Wang, M., Selman, R.L., Dishion, T.J., & Stormshak, E.A. (2010). A tobit regression analysis of the covariation between middle school learners' perceived school climate and behavioral problems. *Journal of Research on Adolescence*, 20, 274-286. doi: 10.1111/j.1532-7795.2010.00648.x
- Waters, L. (2011). A review of school-based positive psychology interventions. *The Australian Educational and Developmental Psychologist*, 28, 75-90. doi:10.1375/aedp.28.2.75
- Welch, G., & Smith, K. (2014). From theory to praxis: Applying invitational education beyond schools- A critical examination. *Journal of Invitational Theory and Practice*, 20, 5-10. Retrieved from <https://www.invitationaleducation.net/>
- White, M. A. (2016). Why won't it stick? Positive psychology and positive education. *Psychology of Well-Being*, 6, 1-16. doi:10.1186/s13612-016-0039-1
- Wiltz, S.M. (2008). Neither art nor accident: New research helps define and develop quality pre-K and elementary teaching. *Harvard Education Letter*, 24. Retrieved from <http://hepg.org>
- Wood, W., Rhodes, N., & Whelan, M. (1989). Sex differences in positive well-being: A consideration of emotional style and marital status. *Psychological Bulletin*, 106(2), 249-264. doi: <http://dx.doi.org/10.1037/0033-2909.106.2.249>
- Zhang, Y. (2016). Making students happy with well being-oriented education: Case study of a secondary school in China. *The Asia-Pacific Education Researcher*, 25, 463-471. doi:10.1007/s40299-016-0275-4

Appendix A: Inviting School Survey – Revised (ISS-R)

DIRECTIONS

Following are a series of 50 statements concerning **YOUR SCHOOL**.
Please use the five-point response scale and select how much you agree or disagree for each item.

SA=Strongly Agree A=Agree U=Undecided D=Disagree SD=Strongly Disagree
Select 'N/A' only if the question does not apply to your school

Statements	SA	A	U	D	SD	N/A
1. Student discipline is approached from a positive standpoint.						
2. Everyone is encouraged to participate in athletic (sports) programs.						
3. The principal involves everyone in the decision-making process.						
4. Furniture is pleasant and comfortable.						
5. Teachers are willing to help students who have special problems.						
6. Teachers in this school show respect for students.						
7. Grades are assigned by means of fair and comprehensive assessment of work and effort.						
8. The air smells fresh in this school.						
9. Teachers are easy to talk with.						
10. There is a wellness (health) program in this school.						
11. Students have the opportunity to talk to one another during class activities.						
12. Teachers take time to talk with students about students' out-of-class activities.						
13. The school grounds are clean and well-maintained.						
14. All telephone calls to this school are answered promptly and politely.						
15. Teachers are generally prepared for class.						
16. The restrooms in this school are clean and properly maintained.						
17. School programs involve out of school experience.						
18. Teachers exhibit a sense of humor.						
19. School policy encourages freedom of expression by everyone.						
20. The principal's office is attractive.						
21. People in this school are polite to one another.						
22. Everyone arrives on time for school.						
23. Good health practices are encouraged in this school.						
24. Teachers work to encourage students' self-confidence.						
25. Bulletin boards are attractive and up-to-date.						

Statements	SA	A	U	D	SD	N/A
26. The messages and notes sent home are positive.						
27. The principal treats people as though they are responsible.						
28. Space is available for student independent study.						
29. People often feel welcome when they enter the school.						
30. Students work cooperatively with each other.						
31. Interruptions to classroom academic activities are kept to a minimum.						
32. Fire alarm instructions are well posted and seem reasonable.						
33. People in this school want to be here.						
34. A high percentage of students pass in this school.						
35. Many people in this school are involved in making decisions.						
36. People in this school try to stop vandalism when they see it happening.						
37. Classrooms offer a variety of furniture arrangements.						
38. The school sponsors extracurricular activities apart from sports.						
39. Teachers appear to enjoy life.						
40. Clocks and water fountains are in good repair.						
41. School buses wait for late students.						
42. School pride is evident among students.						
43. Daily attendance by students and staff is high.						
44. There are comfortable chairs for visitors.						
45. Teachers share out-of-class experiences with students.						
46. Mini courses are available to students.						
47. The grading practices in this school are fair.						
48. Teachers spend time after school with those who need extra help.						
49. The lighting in this school is more than adequate.						
50. Classes get started quickly.						

Appendix B: PERMA Inventory

DIRECTIONS

Following are a series of 34 statements **ABOUT YOU**.

Please use the five-point response scale and select how much each statement describes you.

AA=Almost Always **VO=Very Often** **OF=Often** **SO=Sometimes** **AN=Almost Never**

Statements	AA	VO	OF	SO	AN
1. I feel cheerful.					
2. When I am reading or learning something new, I often lose track of how much time passed.					
3. My relationships are supportive and rewarding.					
4. I finish whatever I begin.					
5. I feel joyful.					
6. I often get completely absorbed in what I am doing.					
7. I actively contribute to the happiness and well-being of others.					
8. Once I make a plan to get something done, I stick to it.					
9. I feel energetic.					
10. I get so involved in activities that I forget about everything else.					
11. I generally feel that what I do in my life is valuable and worthwhile.					
12. I am a hard worker.					
13. I feel delighted.					
14. When I see beautiful scenery, I enjoy it so much that I lose track of time.					
15. When something good happens to me, I have people in my life that I like to share the good news with.					
16. I keep at my schoolwork until I am done with it.					
17. I feel proud.					
18. I feel interested.					
19. I have friends that I really care about.					
20. Most days I feel a sense of accomplishment from what I do.					
21. I feel fearless.					
22. I feel active.					
23. There are people in my life who really care about me.					
24. During the past two weeks, I have been pleased about completing something that was hard to do.					
25. I feel calm.					
26. I feel daring.					
27. When I have a problem, I have someone who will be there for me.					
28. I feel alert.					
29. I feel happy.					
30. I feel lively.					
31. I feel that I am loved.					
32. I feel strong.					
33. I feel excited.					
34. I feel that my life has a purpose.					

JITP Guidelines for Author Submissions

The Journal for Invitational Theory and Practice (JITP) (ISSN-1060-6041) publishes once a year and promotes the tenets of invitational theory and practice, self-concept theory, and perceptual psychology. First published in 1992, the JITP is currently indexed in the ERIC and EBSCO databases.

The JITP seeks to publish articles under two priorities: research and practice. First, manuscripts are encouraged that report research that examines and expands the theory and practice of invitational learning and development, investigates the efficacy of invitational practices, relates invitational theory to other theories of human development and behavior, or focuses on theories that are compatible with invitational theory and practice. Second, manuscripts will be considered that are more focused on the practice of invitational theory. These articles are less data-oriented and could describe authors' attempts to apply invitational theory to a variety of settings or activities related to invitational theory. The editorial board will also consider book reviews of professional books related to invitational or other related theories.

The JITP accepts articles for submission year round. However, the submission deadline for each issue is July 1st. The Journal uses a blind peer review of articles with final publication decisions made by the editor. Upon publication, authors will receive an electronic copy of the JITP. Manuscripts submitted to or under consideration for publication by other journals are not accepted. Authors must follow specific guidelines when submitting manuscripts for publication consideration:

1. Prepare manuscripts in APA style. Refer to the Publication Manual of the American Psychological Association, 6th Edition (2010).
2. Submit manuscripts as email attachments to: JITPeditor@invitationaleducation.net
 - a. All submissions will be acknowledged by return email to the originating email address.
 - b. Questions about submissions should be emailed to the editor, Chris James Anderson: JITPeditor@invitationaleducation.net
3. Include your home and business phone numbers.
 - a. This will allow the editor to quickly contact you if necessary.
4. Create all manuscripts as Microsoft Word® documents.
 - a. Please remove embedded comments, tracked changes, and hidden personal data in the file.
5. Submit two copies of the manuscript – one with your identifying information and one without your identifying information
 - a. The anonymous copy is sent for blind review.
6. Limit manuscripts to less than 10,000 words, double spaced (including references and quotations)
 - a. Use Times New Roman, 12 point font, with one-inch margins on each side, top, and bottom.
7. Format (APA, 2010) the cover page with the author's or authors' names, institutional affiliation(s), and title of the manuscript.
8. On the second page, include the title and an abstract of 150 - 250 words.

9. For the blind copy, do not include authors' names on this or subsequent pages. The author(s)' name(s) should not appear anywhere in the blind copy of the manuscript.
 - a. If the author(s)' own research is used, insert the word Author for all within manuscript citations and all References. For the Reference Page, include only Author (year) for each citation – do not include the name of the article/book, etc.
10. Include tables: created with MS Word table function only, and figures sparingly. These must be formatted per APA (2010) style.
 - a. All tables and figures should be placed (embedded) within the document.
 - b. Any artwork and diagrams should be included as separate digital graphic files, .tif, .gif, or .jpg.
11. Quotations must follow APA (2010) style.
 - a. Lengthy quotations require written permission from the copyright holder for reproduction.
 - b. Authors are responsible for obtaining permissions and providing documentation of permission to the JITP editor.
12. Reviews of manuscripts typically take approximately eight weeks.
 - a. Manuscripts are reviewed by two members of the Editorial Review Board
 - b. Manuscripts are rubric-scored.
 - c. Patience is appreciated but author(s) can contact the JITP editor at any time for a status report.
13. Notification regarding publication will presented to the author(s) from the editor.
 - a. If the manuscript is accepted, details about the issue for publication will be conveyed at that time.
14. For accepted manuscripts requiring revisions, the author(s) MUST use the Review>Track Changes function within MS Word..
15. Further guidelines for Authors or Book Reviews can be accessed from:
<https://www.invitationaleducation.net/publications/journal/>



The (JITP) is the official Journal of the International Alliance for Invitational Education®

www.InvitationalEducation.net