

A CRITICAL ANALYSIS OF PROBLEM SOLVING PERCEPTIONS AS REPORTED  
BY SPECIAL EVENT MANAGERS: A SYSTEMS BASED APPROACH TO  
TRAINING SPECIAL EVENT MANAGERS IN TEMPORAL BASED SITUATIONS

by

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## ABSTRACT

The purpose of this research was to examine special event management as a temporary business model and how it is impacted by problem solving capabilities in its utilization of temporary systems. The phenomenon of special events management and how event leaders must continuously make decisions based upon knowledge, skill, and intuition are the constructs of why events operations are as unique as the events themselves. A paradigm of temporary operational organizations that depend on communication, information, and implementation of operational strategies within unusual and unique environments and on a continuous basis must rely on appropriate instructional systems. The instructional methods that are selected should support event leadership's problem solving methods in accomplishing the goals and mission of the special event.

This dissertation is dedicated to my family.

My father and mother, Dan K. and Marie V. Ross, my brother Dan K. Jr., and

My Poodle, Spencer

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## LIST OF ACRONYMS/ABBREVIATIONS

AA	Approach-Avoidance Style
ADDIE	The acronym representing an instructional design model to Analyze, Develop, Design, Implement, and Evaluate
CMP	Certified Meeting Professional
CON	Problem-Solving Confidence
CPCE	Certified Professional Catering Executive
CSEP	Certified Special Events Professional
EMBOK	Event Management Body of Knowledge
ISES	International Special Events Association
NACE	National Association of Catering and Events Executives
PC	Personal Control
SPSS	Statistical Package for Social Sciences

Key Words: event management; operations management; problem solving

## CHAPTER ONE: INTRODUCTION TO STUDY

The purpose of this research was to explore the problem solving competencies of certified special event managers using a systems-based approach of analysis.

Examination of special event management as a temporary business model and how it is impacted by problem solving in its operation of temporary systems has supported the inevitability to a better defined an instructional design model for event leadership. The phenomenon of special events management and how event leaders must continuously make decisions based upon knowledge, skill, and intuition are the constructs of why events operations are as unique as the events themselves. A paradigm of temporary organizations that depend on communication, information, and implementation of operational strategies within unusual and unique environments and on a continuous basis must rely on appropriate instructional systems. The instructional methods that are selected should support the event leadership problem solving methods in accomplishing the goals and mission of the special event.

The improvement of an instructional system for training operational task analysis of crisis-mode event leadership can be best developed once the learners' problem solving preferences are recognized and explored. The special events industry was examined to further add to research regarding this genre of the tourism industry, as well as, to further understand the complexity of the special events industry. The problem solving skills were studied by administering a Problem Solving Inventory (PSI) survey to a purposive sample of certified event professionals representing the International Special Events Society (ISES) in order to design a strategic training module for the event profession.

The disparity of the ranked importance by event managers will identify the potential instructional gaps for problem solving learning for the improved performance of event managers.

This dissertation explores the focus of the one-time event organization that is created solely to produce a special program with the minimal influence or benefit of an institutional memory or an established operating system. In other words, since the event has never taken place before, there is no historical data as to the operations or outcomes of the event. Each opportunity depends on a certain amount of prior knowledge, however most situations during the production will require quick processing of information and its communication to others. To enable this sequence of leadership data the problem solving methods that are currently being utilized by event managers today were identified.

A research study was performed to explore the problem solving perceptions of special event professionals. The sample population was selected from event management professionals that have received the industry's prestigious Certified Special Event Professional (CSEP) designation from the International Special Event Society (ISES). The topic area was surveyed through a self-administered electronic survey that was sent via e-mail to event professionals.

The research benefit of special event managers is the increased level of awareness of their problem solving skills which will profile a training module design for event professionals. The implementation of an instructional systems design will provide an infrastructure of purposeful alignment of theory and application. Applications of problem solving techniques, as well as, the event skills necessary to complete the

temporary business models' opportunities must be as valid and as targeted with the information available as possible. Special events have a zero shelf life; there are no second tries or attempts to correct poor planning without effecting budgeted costs. Finally, an empirical method of identifying individual problem solving strategies was established which may increase the human performance of temporary administration in event management.

### Organization of the Study

The study was designed to explore the problem solving skills of special event professionals. The sample population was selected from event managers that have received the Certified Special Event Professional (CSEP) designation from the International Special Event Society (ISES). The topic area was surveyed through a self-administered electronic survey that was sent via e-mail to event professionals. The original mailing and second notice was sent by the ISES association's administration via their electronic monthly newsletter. The third email announcement was sent directly to each chapter's leadership for a local distribution. The Problem Solving Inventory (PSI) survey instrument was selected to identify the differences of this group. The inventory was transferred and coded into HTML as a web page and housed on the University of Central Florida's Rosen College of Hospitality Management's server. The collected data was then submitted by the respondents using Form Manager software utilized by the University of Central Florida for collecting web-based data. On the web page, a letter of agreement of the terms and usage of the study was sent along with the link and instructions on how to take the survey. A generic reminder followed a week later after

the initial mailing. In addition, a third email was sent to the regional chapters for local distribution to encourage survey participation. The data was then transferred and analyzed using the research software program Statistical Package for Social Sciences (SPSS). Each respondent was restricted by Form Manager to only one submission by the respondent's email address. Dr. Paul Heppner's Problem Solving Inventory (PSI) is acquired from CPP Inc. of Palo Alto, California.

### Importance of the Study

The research benefit of this study is the increased level of awareness of the problem solving skills of event professionals which will provide supporting evidence for a training module design for event leadership. The implementation of an instructional systems design will provide an infrastructure of purposeful alignment of theory and application. Applications of problem solving techniques, as well as, the event skills necessary to complete the temporary business models' opportunities must be as valid and as targeted with the information available as possible. Special events have a zero shelf life; there are no second tries or attempts to correct poor planning without effecting budgeted costs.

The growth and interest of special events within the tourism industry can be justified by the amount of revenue generated within communities offering festivals, conventions, and events. Destination areas or "hot beds" of events produced have many organizations supporting the special events industry from a variety of vantage points. Convention services, catering, audio-visual services, and other décor organizations support the events industry in various business entities, all managed under the events

model proposed by the CSEP certification examination. Today there are more opportunities to analyze the event phenomena with the volume increase of special event productions and consequently, the more likely to validate a credible instructional design system.

The increased awareness of special event management and its positive relationship to impacting event leadership, as well as, the instructional design and new technology applications for the training of event professionals can enhance the performance of these individuals. In addition, the proficiency of event management will lead to higher quality performances of events and will create an environment of professionalism that will be associated with the desired destination as an event site. The financial impact of special events on the site location will greatly be enhanced and add to the perceived value of the destination for conferences, conventions, events, and corporate meetings. This additional revenue from this industry segment will increase the yield to the traveled destination through event tourism.

### The Relationship of Special Events and Education

The instructional design process includes project management, its implementation, and its evaluation. The degree of instruction is contributed to special events through the application of information and how the information is communicated. The curriculum is significant, however, the technology that is utilized in the instruction needs to be identified and the learning gaps need to be addressed for problem solving learning for special events.



A formalized instructional model of special event management for the utilization of problem solving management leadership and the selection process of task importance is best described in a matrix model of cognitive behavior. The relationship of the instructional design ADDIE Model, should also incorporate the alignment of the event management's body of knowledge (EMBOK) solution solving areas of operations.

#### Objectives and Contributions of the Study

The objectives of the study are to identify the problem solving skills preferences of event managers. The preferences of this group have added to the PSI analysis. In addition, the research supports the ADDIE instructional design model to convey the event management strategies in a more effective approach for educational purposes. Finally, the research contributes to the body of knowledge of special events, instructional design systems, and problem solving perceptions of management.

#### Assumptions of the Study

The assumption of this study is that special event managers have a pre-determined perception of themselves as problem solvers in the event production environment. The problem-solving perception may determine how these participants view themselves as event professionals, as well as, how they may respond to specific types or styles of educational design. The inventory may also reveal areas of improvement to better prepare the event professionals.

### Limitations of the Study

The limitations of the study may include the number of respondents. Though a twenty-three percent of return is acceptable there are more available candidates that did not participate. In addition, limiting the study to only one professional organization's certified designation of event professionals maybe of an interest. Perhaps more groups of other event specific professional designations should be included to widen the scope of event professionals and to capture a more diverse task-oriented group of event professionals. Furthermore, utilizing a web based surveying method may have restricted some eligible respondents to participate. There may be a learning curve in managing the internet or responding to electronic communiqués.

### Summary

Special events management may be improved by examining the results of event professionals' preferences for problem solving. In addition, the instructional method of teaching event management is better synchronized in relation to the type of management leadership that needs to be achieved for event success and for the task analysis of event operations. Pre-determining how event professional perceive themselves may adequately supply a needs assessment for teaching this group and what areas of problem solving that may be of a concern. The study will allow insight to the dynamics of this group's learning needs and possibly reflect their preferred learning style.

## CHAPTER TWO: LITERATURE REVIEW

### Evolution of Event Management Instructional Design Literature

Instructional systems design is a process of determining what to teach and how to teach it. The Instructional Systems Association ([www.isaconnection.org](http://www.isaconnection.org)) defines an instructional system as:

“a performance enhancing product or service that can be delivered at a consistent level of quality across user groups..(they) consist of various combinations and types of written materials, audio, visual, computer instruction, video discs and tapes, films, and other delivery systems designed to improve performance in the workplace” (ISA, 2004).

The key is to understand which approach to instructional design needs to be recognized (motivational, systems, etc) for event management education and then the model can be identified to prescribe the task analysis of instruction necessary to accomplish the desired performance change in event operations management.

The concept and design of hospitality curricula has become critical for institutions to maintain credibility of the students’ performance outcomes to the hospitality industry. Smith and Cooper (2000) reported that, as we move into the future, ‘the goal of tourism and hospitality education will remain to educate and train future generations of employees in the sector as well as perhaps to educate the consumer’. Tourism and hospitality education is a sector moving from uncertainty to maturity as governments recognize the value and scale of jobs created in tourism and hospitality-currently estimated at 120 million worldwide (Fayos, Sola & Jafari,1996).

For tourism organizations to be competitive, the adoption of strategies and measures for human resources development as investments in human capital is critical (International Hotel and Tourism Association, 1997). In this context, identification of industry needs and requirements leads logically to the establishment of sector-specific education and training skill standards and the involvement of industry in academic curriculum design (Smith 1996).

In an applied subject area such as tourism and hospitality, it is clear that an important consideration for the curriculum is the social, cultural, and economic setting of the course. Jenkins and Shipman (1976) are unequivocal in their view: “The curriculum can only be fully understood in its context” as the curriculum is socially and historically located and culturally determined, effectively interwoven in the fabric of society (Hooper, 1971). That being said, the clarity of the development of hospitality education within sector-specific areas such as event management must remain congruent within instructional design guidelines of theoretical models such as the ADDIE design model. The ADDIE instructional design model for training was developed by the United States military to identify the specific areas of educational course development to be implemented into field training manuals. The acronym represents the following steps of course development; A, Analyze, D, Develop, D, Design, I, Implement, and E, Evaluate. This method of educational course design provides structure and guidance to the determination of the task specifics, learners’ needs, and assessment outcomes of the applied instruction. Utilizing this original taxonomy in alignment with the known body of event knowledge will provide resources for managerial performance improvement while leading event operations.

## Event Management

Julia Rutherford developed a taxonomy of event management. In order to establish the realm of event management she noted that the following information must be addressed: Event management is the process by which an event is planned, prepared, and produced. As with any other form of management, it encompasses the assessment, definition, acquisition, allocation, direction, control, and analysis of time, finances, people, products, services, and other resources to achieve objectives (Rutherford, 2004).

An event manager's job is to oversee and arrange every aspect of an event, including researching, planning, organizing, implementing, controlling, and evaluating an event's design, activities, and production. Event management is an intricate weaving of the process and the scope of management functions. The processes are interwoven through the foundations for each event, with evaluations and revisions from one event forming the research for the next event (Rutherford, 2004). Rutherford uses a diagram model of a piece of fabric to illustrate how the management functions are interwoven with the process functions and how all these must interlink to develop a strong program without holes or weaknesses (See appendix A).

Professional knowledge, which consists of technical knowledge, specialized skills, problem solving ability, and ethical standards used to function within a professional jurisdiction, must be transformed into formal knowledge systems combined with experiential or situational knowledge systems. A proposed knowledge domain structure captures and makes explicit the scope of this knowledge system, and provides taxonomy for incorporating additional expertise, experience, and transferred knowledge

and applications. These knowledge domains are: Administration, Operations, Marketing, and Risk Management.

Each domain has many functional units within its taxonomy to illustrate the many types and levels of job functions that emerge within each domain. These functional units create the event management coordination and implementation plan. Many of the units and topics represent specific specializations, disciplines, or its own distinct industry, with its own body of knowledge and credentials, some requiring specific licenses in many jurisdictions, with which the event manager must interact or subcontract in order to plan and produce an event. For example, catering management, traffic management, and emergency management are all included within the scope of an event, and all are distinct professions with their own expertise criteria, curricula, and credentials.

At this stage the knowledge domain structure represents a simple mapping of concepts (see appendix B). It is not practical to numerically quantify the units or topics contained in the various certification competency blueprints, vocational qualifications, guides, and texts because standard units and terminology have not been adopted by the industry. This initial taxonomy serves as a platform that will enable expert participants, from a variety of disciplines around the world, to continue its refinement and develop a shared understanding and interaction. In addition, Rutherford proposes a domain structure that serves a numerous purposes and uses. The purpose of the illustration is to map the scope and complexity of this profession to internal and external constituents and stakeholders, current and future practitioners, and allied and supplier industries. The schema increases the respect and reverence for the profession of event management by legitimizing and certifying the complex functions of event management.

The establishment of a global Event Management Body of Knowledge (EMBOK), with the domain structure as the foundation, may influence all levels of academic and professional development programming (formal, association, and informal), research, publications, credentialing, product development, specialization, assessment criteria, and many other outcomes.

Integration management includes the processes, procedures, and controls to ensure event project details and tasks are integrated throughout the scope of the event processes, tasks, and decisions. This management style fosters an elaborate knowledge base that supports learning outcomes can be a combination of learning conditions. The following examples are only a sample of possible solutions. Further research and development in this area is needed and necessary for continuing education for event professionals and the success of the event's industry to cross over into its own hospitality education discipline.

### The EMBOCK Event Management Model

#### The Development of the EMBOK Structure

Development of an event management body of knowledge (EMBOK) is the foundation that leads the event management industry from a discipline or “emerging” profession into a “legitimate” profession recognized as requiring and offering expertise and specialized knowledge (Abbott, 1988; Goldblatt, 2004; Silvers, 2004).

Event industry associations, such as the International Special Events Society (ISES) have developed a certification program for event professionals titled Certified

Special Events Professional (CSEP). The CSEP designation, as well as other associations' certifications, identifies task analyses or core competencies essential to perform events.

The EMBOK model and taxonomy based on a content analysis of the event process was proposed by Silvers (2004) and expanded at the 2004 International EMBOK Imbizo. A conceptual framework for an EMBOK structure was devised and proposed by the International EMBOK Executive that provides a framework for the collection and study of the knowledge and processes that are used in the management of events (Silvers, Bowdin, O'Toole, & Nelson, 2004). The model is very thorough in identifying domains of knowledge and functional areas that provides a logical methodology to the management of special events. The phases specified in the EMBOK Structure Model illustrate the sequential nature of event management, highlighting the criticality of time in any event project as it gathers momentum toward the event itself. The phases include initiation, planning, implementation, the event, and closure, and are derived from traditional project management terminology (PMI, 2000).

### The Core Values

Creativity, Strategic Thinking, Continuous Improvement, Ethics, and Integration are the core values of the EMBOK model. The core values identify the ideology used in problem-solving decisions regarding successful outcomes of event planning.

Creativity provides innovation and imagination within event solutions. Strategic Thinking supports vision and alignment of project's requirements and structure. Goals and objectives to maintain a focus must follow a logical order to achieve proficiency and

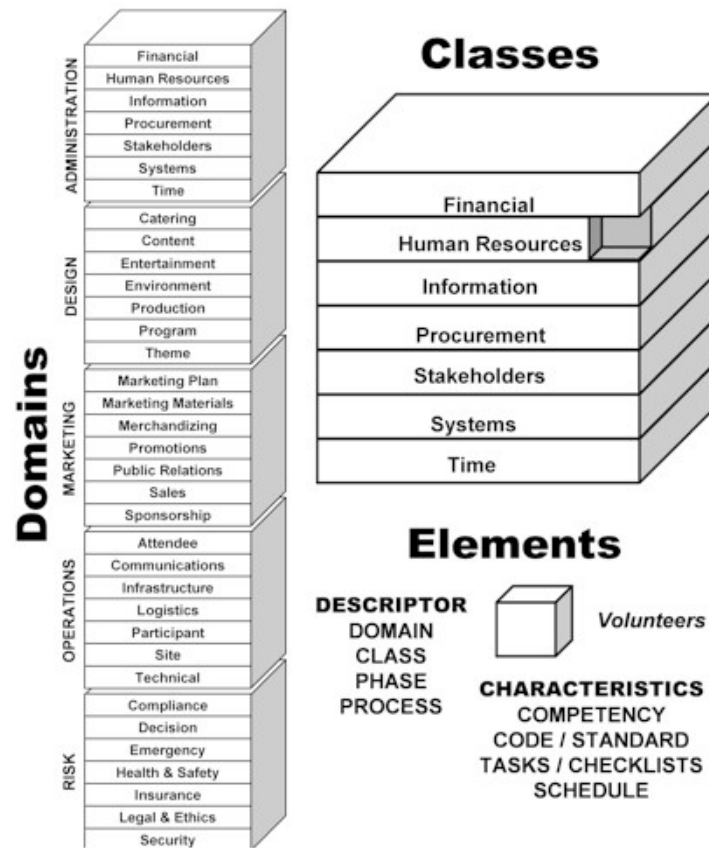


success. Tactical implementation must also be coordinated so Continuous Improvement can be optimized. Proactive procedures and systems allow the event organization to enhance the event outcome. Ethics include alternatives and measures taken that reflect the standards guiding decisions, negotiations and activities that maintain honesty, equality and civility. In addition, Integration utilizes the coordination of decisions of the event project and ensures all the attributes of the project development are appropriately connected.

### The Knowledge Domains and Classes (Functional Areas)

The EMBOK Structure Model consists of five “knowledge domains” that encompass 35 functional areas, referred to as “classes” (see Figure 1). The structure of this model allows for the development of systems and the documentation that must take place for a efficient and effective management of events and problems and changes that arise with them, in addition to the standard systems required for a advanced performing organization that is capable to continuously make analytical improvements to the systems. Most importantly the model shows all the responsibilities that an event manager must complete. The domains include administration, design, marketing, operations, and risk. The CSEP Examination Blueprint has similar competency areas; administration, coordination, marketing, and legal, ethical and risk management. The International Special Events Society recognizes the CSEP Exam Blueprint as the criteria to be mastered to pass their certification examination. The examination illustrates the event professional’s ability to analyze, synthesize, and apply the various competencies within the scope of event management.

Figure 1: Domains, Classes, and Elements of the EMBOK Structure Model



Source: International EMBOK Executive

### Administration

The Administration domain primarily supports the appropriate dissemination, direction and regulation of the resources required for a special event. The event professional must demonstrate the ability to research and develop a proposal for clients. Determining the purpose of the event and prioritize event goals and objectives, as well as, identifying problem areas and evaluate options are core critical first steps. The responsibility for creating the event infrastructure with staffing, time lines, budgets are a component. Administration also includes overseeing communications between all

parties, monitoring processes, and preparing pre and post reports. In addition to staffing the event, all training, monitoring, and evaluating of personnel must be performed. Finally, the entire event process needs to be re-evaluated, analyzed, and reformed.

### Design

The Design domain focuses on the expression of the goals and objectives of the event and its idealistic dimensions. Creativity is expanded into catering, entertainment, and theme development of the event. Décor and other artistic interpretations are defined within the event design. Ancillary programs, speakers, exhibits, performers, and event activities are produced within this domain's focus. This is also the area of development that any gap analysis or S.W.O.T. analysis would take place.

### Marketing

The nature of special events is an experience based product. A distinctive relationship is developed between the client and provider since the "product" is intangible for the most part. Service, creativity, and problem solving are not considered hard goods that can be easily marketed. The Marketing domain addresses the functions that identifies and develops the promotional strategy of the event. Defining and integrating a marketing plan through situational analysis, marketing objectives, and return on investment (ROI) are the beginnings of the marketing process. Public relation strategies, collateral materials, invitations, coordinating ceremonies, and identifying protocol needs are also a few of the marketing objectives for event professionals. In some cases, event marketing programs that include sponsorships, donors, gifts, and grants can be added as part of the

marketing responsibilities. Evaluations and special services are part of the facilitation to the temporary business development. Marketing is critical in cultivating the economic and political support necessary to shape the vision and value of the event.

### Operations

The Operations domain is the specific area that blends the all the components into a final masterpiece. The people and services are synthesized into the creative aspects of the event to implement the logistics of the event. Products that are designated for the event application are introduced to the non-tangible event features that are required to support the event expectations. The functionality of the event lies within the operations domain and is critical to the flow and perception of the attendees. All management areas are linked together into the improvisational problem-solving situations that occur at the event site. Attendee management, communications management, infrastructure management, logistics management, as well as participant, site, and technical management all come together within the event coordination.

### Risk

The Risk domain provides the legal and protective entities associated with those of any traditional business organization, as well as of those of special events. Risk assessments and response plans are analyzed and developed for implementation. Contingency plans for operations and administration are also included under this domain. Municipal health and safety ordinances are monitored and must comply with all federal, regional, state and local legislations. Labor unions, licensing regulations, permits,

security documentation are all included within by this area of event management. In addition, bids, contracts, and ethical policies are mandated by the stakeholders to secure the event and attendees experience.

### Event Management Education

There are few published examples of teaching events management, let alone those related to problem-based learning. Clearly, methods to improve the education of hospitality students in the field of events need to be developed and documented. Experiential or real world participatory learning has long been recognized as a powerful tool in education (Daly, 2001; Papamacros, 2002). Summaries of the educational benefits of conducting real business activities include the development of creative and critical thinking skills, practical experience to assist in career development, integration of different elements of coursework, better interpersonal skills and improved self-confidence. (Mascardo & Norris, 2004).

Basic principles of adult education are similar in theory, however all adult education is reflective of only the individual learner and the changes from the beginning point of the individual's undertaking (Beatty, 1992). The field of adult education constantly evolves by definition as to various perspectives of what skill set, knowledge, or problem-based learning is to transfer to the adult. How will the transformation take place, and why? In 1970 Schroeder reviewed approaches for defining the field, including classification, structural analysis, and operational analysis. Boyd and Apps (1980) continued to redefine the discipline by presenting a three-dimensional model in which transactional modes define the manner in which adults are grouped for learning.

"The central point of education is to teach people to think, to use their rational powers, to become better problem solvers" (Gagne, 1980). Educators have identified problem solving as a life skill and not only a learning outcome. The ability to solve problems logically and successfully can morph itself around a variety of opportunities that can provide outcomes for a variety of issues. Memorization and testing mastery can not always transfer to unique situations outside of the original context or quandary. Therefore, inadequately prepared learners can not function outside of mundane professional contexts following generic education and training. Jonasson stated in 2002 "The discrepancy between what learners need (complex, ill-structured problem-solving experience) and what formal education (schools and corporate training) provides represents a complex and ill-structured problem that instructional design may be able to ameliorate." Why are we so inept at engaging learners in problem solving? Jonasson (2002) claims, "we do not understand the breadth of problem-solving activities well enough to engage and support learners in them." Instructional design literature does not always acknowledge problem solving strategies. According to Jonasson's article *Toward a Design Theory of Problem Solving*:

"Smith and Ragan (1999) include a chapter on problem solving; however they prescribe only general problem-solving strategies as solutions. Gagné, Briggs, and Wager (1992) acknowledge that problem solving learning is difficult and suggest only a brief template for applying the events of instruction in the same way they treat concept-learning and rule-learning outcomes. The only instructional-design text that systematically addresses problem solving (despite not referring to it as problem solving) is the innovative text by Van Merriënboer. It focuses on training the complex cognitive skills that are required to solve problems and uses different analysis processes that are based on traditional, hierarchical task decomposition (which is insufficient, some researchers believe, for analyzing the range of problem-solving outcomes; see Jonassen, Tessmer, & Hannum, 1999 for descriptions of alternative methods. Van Merrienboer treats all problems the same. Yet the most pervasive assumption of instructional design is that different

learning outcomes necessitate different conditions of learning (Gagné, 1980). So, instruction to support problem-solving learning outcomes should differ from those used to support, for instance, concept learning or rule learning. However, implied in component models of instructional design (e.g., Merrill, Dick & Carey, Gagne, Briggs & Wager) is the belief that identifying and learning the component concepts, rules, and principles that comprise a problem space enables learners to solve a problem. Unfortunately “mastering each component skill is not enough to promote non-routine problem solving” (Mayer, 1998). If problem solving is to be regarded as a separate type of learning or intellectual outcome, this assumption is problematic. An underlying assumption of this paper is that problems are not the same and so cannot be supported in the same way as component skills. Assuming that problem solving requires more than the acquisition of prerequisite skills, specific models of problem solving instruction need to be proposed and tested” (Jonassen, (n.d.)).

In addition, focusing on problem solving for the training and educating of special event managers is a learning theory worth exploring in order to put more focus on the individual’s ability to assess and adjust within any problem-based scenario. Problem-based learning (Barrows, 1985; Barrows & Tamblyn, 1980) focused on problem-solving outcomes and they recommend instructional strategies, such as authentic cases, simulations, modeling, coaching, and scaffolding, to support their implicit problem-solving outcomes. (Jonassen, 2000a).

Learners of the field of hospitality fall true to many of the principles of adult education. Sigala and Connolly in the article “Major trends and IT issues facing the hospitality industry in the new economy,” articulated this focus at the Sixth Annual Pan-European Technology Exhibition and Conference which was held in February 2001 in Paris. The conference was organized by the International Hotel and Restaurant Association. Presentations, workshops, and panel discussions that appealed to all level of competence from novice to expert and that offered great educational opportunities as well as visionary thinking for the future of hotel technology was the gathering’s focus. The

conference was titled as "In search of the Next Big Thing: IT Issues and Trends Facing the Hospitality Industry." The general theme of the conference was "Hospitality and Technology: Two Dynamic Industries, One Winning Combination". The conference aimed to bring together all relevant stakeholders to discuss how to best leverage and manage the strategic significance and the management of hospitality employees.

In many classrooms, the predominant training model is direct instruction, which called instructivism or objectivism (based on information processing theory). The trainer's central role is to transmit knowledge to learners and the learner's role is to absorb information (reception and compliance). In this model the trainer's performance is critical. Also, there is an over-reliance on rote memorization, which does not give the learners the skills in how to think and solve problems. However, in today's real-world context, the work environment is becoming a learning environment (i.e. e-learning and distance education). Learners will not make use of concepts and ideas unless they use them through some type of process, that is, learners master only those activities they actually practice.

### Instructional Systems in Hospitality Management

Hospitality management is the proposed subject area for defining improved systems of instruction and so the experiential or applied learning design also needs to be addressed to better support the focus of the research.

The mastering of technical skills is one purpose of experiential learning. Hayes (1982) studied the hospitality practicum at Purdue University and reported that the students in the hotel, restaurant, and institutional management program did gain specific



job skills. Pauze, Johnson, and Miller (1989) stated that the formation of technical skills is an objective of the internship program in Ohio State University's hospitality curriculum. Mahoney (1981) wrote that experiential learning can furnish hospitality students with technical training.

Chickering (1977) stated experiential learning can apply to any kind of learning through experience. Experiential learning is often used by providers of training or education to refer to a structured learning sequence which is guided by a cyclical model of experiential learning. Less contrived forms of experiential learning (including accidental or unintentional learning) are usually described in more everyday language such as 'learning from experience' or 'learning through experience'

Experiential learning, applied learning, on-the-job-training, and many others are terms used to identify the opportunity of utilizing instruction from theory to practice. Many hospitality programs, including the Rosen College at the University of Central Florida (UCF), require a number of cooperative education hours to be completed before graduation. These types of curriculum enhancements allow learners to develop a level of skills that are necessary for employment within a given industry. The main components of operational training for the hospitality industry can be classified as skilled or unskilled, motivational, and attitudinal of the learner.

Wilmore (2002) talked about performance interventions and how today's organizations and clients of training programs are looking for better ways of solving problems and utilizing better gap analysis. However, Feinstein, Raab, Stefanelli (2005) reported that hospitality education is challenged as to how to apply successful instruction

that actually provides hospitality neophytes the knowledge necessary to be successful professionals in this unique discipline.

### Problem-based Learning and Improvisation

#### Temporary Systems for Problems and Solutions

According to Breton (1998), changes in instructional strategies are not new. This is also true for the hospitality industry and in particular, event management. Many disciplines, notably medicine (Gallagher et al., 1992) and law (Moust et al., 1989), have drastic changes in their instructional strategies. Breton believes “the tendency is to have a more active participation of the students” Problem-based instruction allows learners to experience the process first-hand. Integrating them into the solution by utilizing their abilities to problem solve.

Special event managers continuously need to improvise and problem solve due to the nature of events being temporary business entities. Ironically one of the major annual conferences for the events industry is even titled Event Solutions. The enhancement of problem-solving performance of conventional knowledge is through external representation. Breton (1998) reported that there was very little research done in problem solving teaching, especially in the accounting field. Cooperative learning approaches, implying team work in problem learning methods have been studied by Cottell and Mills (1992). Another method frequently used is case studies. Incorporating case studies into the instructional design may or may not be of value. According to Breton (1998), Prengt disregarded the important differences with Harvard case methods in problem

learning methods since students may have no or limited previous specific knowledge regarding the problem to be solved. Classic Harvard case method is purely an activation and an application, in a case context, of some previously acquired knowledge and skills. (Breton, 1998).

“Problem-solving skills are important enough that they should be taught even if it is necessary to reduce coverage of technical topics in existing classes” (Brandy, 1994).

Breton furthered that active methods would be more beneficial because they frequently subjected students to problem solving skills. Bandy (1994) supported this reasoning.

“Although it may be appropriate for students to rely on textbooks early in the educational process, it is essential that they learn to rely on the other sources before they enter the profession. Further, students need to be taught how to use and when to rely on alternative sources (Bandy, 1994) such as in analyzing case studies.

Similar to improvisational management, problem based learning methods allow for the learner to become independent when gathering information and to develop objectives and goals.

Dynamic environments, such as special events, provide a framework for improvising. Fonstad (2001) researched the focus of technology on several groups and concluded that “improvising is essentially a process of innovation that assumes changes are unpredictable and evolve out of situated experiences”.

Ciborra (1996) proposed that there were several roles for information technology as a support to smooth the progress of improvisational management.

Instructional technologies utilized for management purposes provide the same resources for problem-based learning. Collecting, capturing, and managing information about a special event helps facilitate the knowledge base on a continuous momentum. Enabling communication and developing a mechanism to share information is not unique only to educators but also hosts the process for event managers as well.

A key factor in problem solving is improvising. In an article by Fonstad (2001), Weick (1993) has noted that improvisation could be considered as a kind of bricolage and the improviser as a kind of bricoleur. Bricolage, according to the anthropologist Levi-Strauss (1966), refers to the process of drawing on the materials at hand to create a response to a task on the spot. Weick (1993) also noted that

“To the bricoleur, the materials are not associated with any single specific use, but instead, are associated with all the ways in which materials were used before. By always being open to and in the process, trying out new ways to use an object, a bricoleur develops a richer understanding of the object and consequently is more able to develop innovative uses for the object”.

Fonstad (2001) recorded that a core element of improvising was not that of guessing or randomly piecing together resources. “It consists of creatively integrating features of the evolving situation in relation to structures common to the actors and audience-it is structured bricolage.”

Problem solving research in testing personalities for management is an opportunity to further identify event managers’ abilities to produce events. Problems in real life are usually unstructured and the motivation of the information search is oriented by the vision of the problem (Breton, 1998). Therefore, the problem solving confidence, as well as, the problem solvers’ approach or avoidance to problem solving should be

identified within the targeted audience of event producers. An individual's perception of problem-solving capabilities will support their ability to cope. Coping with generating solutions can be defined as behavioral; however teaching problem-solving logic is more demanding. Smith and Kulikowich (2004) defined an application of generalizability theory and Rasch measurement assessment using complex problem-solving skills. The assessment revolved around a school kickball team's problem-solving skills. A goal was to identify a way to teach students to perform competently within given tasks. These resources can be adapted to those necessary for increasing human performance with in the special events industry.

In summary, problem-solving opportunities are unique in design and the confidence of the problem solver needs to be that which will allow them to rationally select appropriate solutions and enable within them the confidence to utilize those solutions. Instructional systems that incorporate problem solving strategies will allow practitioners a reliable mechanism for higher success rates in solutions selected. In addition, a comprehension of event producers' behaviors and attitudes towards problem solving should allow insight to their ability to successfully conduct operations of event management.

### Problem-Solving Assessment

The Problem Solving Inventory (PSI) by Dr. Paul Heppner (1988) is a research tool to investigate relationships between problem-solving judgment and a range of cognitive, affective, and behavioral variables related to coping and managing.

“Applied problem-solving skills are of a special interest to professionals engaged in helping individuals to solve real-life problems. Counselors and clinicians in particular are concerned with problem solving since the central reason for their professional specialties is that people have problems they are unable to resolve themselves (Fretz, 1982; Krumboltz, 1965; Mahoney, 1974).”

In addition, the Problem Solving Inventory is used to evaluate an individual's perceptions of his or her own problem-solving behaviors and attitudes. The PSI manual defined problem solving as coping or as any goal-directed sequence of cognitive operations (Anderson, 1980) employed for the purpose of adapting to internal/external demands or challenges (Sternberg & Salter, 1984).

## CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

### Research Design and Methodology

This study explores the problem solving competencies of certified special event managers using a systems-based approach of analysis. The problem solving skills are studied by administering a Problem Solving Inventory (PSI) survey to a convenience sample of certified event professionals representing the International Special Events Society (ISES) in order to design a strategic training module for the event management profession. The purpose of the Problem Solving Inventory (PSI) is to assess the individuals' perceptions of their own problem-solving behaviors and attitudes.

The survey was duplicated with HTML to be accessible via the Internet. The site hosting the survey was forwarded to the target sample attached into an email from the association's headquarters. A second reminder was followed up ten days later from the original broadcast. In addition, a final call to respond to the survey was sent to each chapter president to distribute within their own geographical reach. The data set collected was analyzed and compared to other test results of the survey.

### Research Question

In an effort to determine the degree of problem solving behaviors of those in the event planning and management profession, the following research question was answered:

Q1: What are the problem-solving perceptions of special event managers for the development of an educational training module for the event management profession?

## Methodology

A research study was performed to explore the problem solving preferences of certified special event professionals. The topic area was surveyed through a self-administered electronic survey that was sent via e-mail to certified special event professionals (CSEPs) through the International Special Events Society's monthly electronic newsletter and email database. This was the most efficient and time effective method to survey the 297 certified professionals. The purpose of this research method was to help collect a consensus on the topic of management within a problem-based temporary administration.

## Survey Design

This research study was designed to provide insight for an effective instructional design model for problem-based temporary administration. Data was collected to assess event professionals' self-perceptions of their behaviors and attitudes towards problem-solving. This research was done using quantitative frequency analysis of surveys designed for special event administration and problem-solving. The problem-solving preferences was collected using Dr. Paul Heppner's "The Problem Solving Inventory" (PSI) purchased through CPP, Inc. formerly Consulting Psychologists Press from Palo Alto, California. The PSI was found in the Eleventh Mental Measurements Yearbook with relevant support for identifying individual's perceptions of their problem-solving attitudes and behaviors. The data collected from event producers taking the PSI will add further insight into the qualities of those performing special events that have not been



recognized before. The reliability of the PSI was identified by the instrument's previous usage of other populations.

### Data Collection

Data collection was done through administering Dr. Paul Hepner's Problem Solving Inventory (PSI) survey through email. The convenience sample population is Certified Special Events Professionals designated by the International Special Events Society. The data collection was performed to explore problem solving attitudes and behaviors of special event professionals. The sample population was selected from event managers that have received the Certified Special Event Professional (CSEP) designation from the International Special Event Society (ISES). The topic area was surveyed through a self-administered electronic survey that was sent via e-mail to event professionals. The survey instrument was transferred and coded into HTML as a web page and housed on the University of Central Florida's Rosen College of Hospitality Management's server. The collected data was submitted to the University of Central Florida's, Rosen College server by the respondents using Form Manager software used by the University for collecting web-based data. In the email, a letter of agreement of the terms and usage of the study was sent along with the link and instructions on how to take the survey (see Appendix C). A generic reminder also followed after the initial mailing. The data was then transferred and analyzed using the research software program SPSS. Each respondent was restricted by Form Manager to only one submission by the respondent's email address. Dr. Paul Heppner's Problem Solving Inventory (PSI) is acquired from CPP Inc.

## Problem Solving Inventory

The Problem Solving Inventory has been used in medical and educational settings as well as counseling for determining an assessment of a person's style of coping or managing troubling situations. The PSI scores can help predict the cognitive, affective, and behavioral variables that can be constructive in assessing how people evaluate their problem-solving techniques. Learning by observation, preservation, and wishful thinking are some of the variables presented in the inventory. It is important to note that this inventory is to be used only as a tool in identifying behavioral styles and should not be used solely as a predictor of abilities.

The PSI has been used as an investigative tool to compare relationships between problem-solving appraisal and a range of variables related to coping. These variables represent cognitive, affective, and behavioral differences. In this study the data collected by the inventory will encourage preferences as to how the EMBOCK skills will be confronted and possibly implemented. These behavioral indicators may impact or determine the instructional design sequencing or medium preference of instructional implementation. The PSI scores may provide practical information for developing instructional interventions when aligning a person's problem-solving consideration and their actual skills are analyzed.

The PSI instrument was tested many times for factor analysis by Heppner and many others. The final 35 survey questions were all originally valid indicators of positive problem solving abilities however to provide diversity within the nature of the questions and a non-skewed response a balanced number of questions with positive and negative connotations were used. Positive connotations for this survey were statements

that involved self-confidence, approaching problems, and the belief that one has personal control. Negative statements are statements with opposite beliefs. In order to appropriately score for the addition of the balanced number of negative and positive questions a scoring key was developed which reverses the numbers assigned to the Likert scale for the negative half of the questions. However, the Likert scale itself was not changed through out the survey but only for scoring. The results of the factor analysis gathered through the use of the PSI instrument indicate the presence of three problem solving dimensions. Confidence in problem-solving ability, an approach-avoidance style, and perception of personal control are the constructs that revealed of the individuals' perception. The estimates of reliability have been computed for all three constructs for various groups' studies and all correlations were statistically significant, with probabilities less than .0001 (Heppner & Peterson, 1982).

### Sample

The research sample was a purposive sample of special event professionals that have achieved the designation of CSEP or Certified Special Event Professional from the International Special Event Society. These 297 individuals are a significant sample of industry professionals, since they have taken the time and expense to certify themselves through an educational examination process for their profession. The CSEP title is the assurance of professional accomplishment in the special events industry. It is earned through education, performance, experience, and service to the industry, and reflects a promise to professional conduct and ethics. The CSEP designation is awarded by the

International Special Events Society (ISES) and its Certification Committee. ISES is the only international umbrella organization representing professionals in all disciplines of the special events industry.

The population represented members of the United States and International members that have completed the certification process and successfully passed a written examination. This population consisted of a wide range of ages, degrees of education, and financial status.

### Statistical Analyses

A composite of event professionals was collected based upon their response to the Problem Solving Inventory. The analysis of the data taken from the survey was reported with descriptive statistics. The consistence of the mean, range, standard deviation, and frequency distributions was reported. The PSI of each participant was analyzed to see if there was a common trend within the event industry professionals in order to determine an appropriate training module in the preparation of this profession. The demographic variables of gender, total years of event experience, education level, and industry segment were analyzed using descriptive statistics. In this study, the Statistical Package for Social Science (SPSS) version 12 was used to manipulate the data.

### Summary

In conclusion, the research of special event managers' problem solving strategies has increased the level of awareness of the leadership style used by event managers and how they must strategize their ranking of tasks to implement management during a

complex and time constraint situation. The implementation of instructional systems design provides an infrastructure of purposeful alignment of theory and application. Problem based learning can not be left up to the intelligence of event managers to determine successful outcomes of their decisions. This is due primarily because of educational component of skills that need to be intertwined with the behavioral preference. Applications of problem solving techniques, as well as, the event skills necessary to complete the temporary business models' opportunities must be as valid and as targeted with as much information available as possible.

## CHAPTER FOUR: DATA ANALYSIS

Of the 71 surveys collected, two of the returned surveys were inadequately filled out and were not usable. Sixty-nine (23.2%) of the 297 surveyed reported all necessary scaled items and were analyzed. The Statistical Package for Social Sciences (SPSS) version 12.0 was used for descriptive statistics.

The survey's demographic statistics are presented in Table 4.1 and Table 4.2. Of the 69 respondents 77% were female and 23% were male. This research is unique to previous uses of the PSI instrument in that professions were surveyed whom thirty percent had completed a high school degree, 12% completed an associate's degree or AA, 27% finished a bachelor's degree, 11% a Masters degree, and 2% a terminal degree of either a PhD, EdD, JD. In previous tests, undergraduate or university students were used as a sample population. In addition to the reported formal education levels the following professional certifications were represented; 80% CSEP only, 11% CSEP and CMP, 1.4% CSEP and CPCE, and 4.3% had a CSEP and another unidentified certification (see page xi for review of certifications). Specific event oriented demographic data was also collected. The annual income mean of 63 respondents was \$68,948. The average number of events produced of the original n=69 was 17 per year with an average event revenue of slightly less than 1 million dollars. In addition, the average age of these professionals is 43 years and the average number of years in the event industry is 17 years.

Table 4.1 Descriptive Statistics for Study

Characteristic	Frequency*	Percent
<b>Gender</b>		
Male	16	23.2
Female	53	76.8
<b>Education</b>		
High School	21	30.4
AA	8	4.6
Bachelor Degree	27	39.1
Associate Degree	11	15.9
PhD/JD/ any DD	2	2.9
<b>Certifications</b>		
CSEP	55	79.7
CSEP, CMP	8	11.6
CSEP, CPCE	1	1.4
CSEP, Other	3	4.3

\*Note: Demographic variables not totaling 69 represent missing values.

Table 4.2 Frequency Statistics for Study

Characteristic	N	Minimum	Maximum	Mean	Std. Deviation
Years in Industry	69	4	36	17.41	8.0299
Age	69	25	68	42.64	9.902
Events per Year	69	4	36	17.3986	8.03969
Income	63	15000	200000	68948.41	32193.504
Event Revenue	52	0	12500000	972423.08	1868012.159

Each of the survey's thirty-five items has a factor analysis for one of the three classifications: Problem-Solving Confidence (CON), Approach-Avoidance Style (AA), and Personal Control (PC). The questions that are classified into the Problem-Solving Confidence factors show the level of self-assurance when problem solving. The possible range of any one individual's CON score was between 11-66. Those classified as Approach-Avoidance Style factors show the extent of which the individual will avoid or approach problem solving. The possible range of any one individual's AA score was between 16-96. Lastly, those questions classified as Personal Control factors show the level of which the individual feels that they are in control of their emotions and behaviors when solving problems. The possible range of any one individual's PC score was between 5-30. Each of the questions were answered by the sample respondents using a 6-point Likert type scale of "1" meaning "Strongly Agree" and "6" meaning "Strongly Disagree". However, for scoring purposes for all the negative questions a "6" was assigned to "Strongly Agree" and a "1" was assigned to "Strongly Disagree". After scoring for each confidence factor was complete, a lower score showed a more positive outcome. Positive outcomes are those associated with self-confidence, approaching problems, and having personal control when dealing with problems. The Problem Solving Inventory descriptive statistics to each of the thirty-five questions are shown in Table 4.3.



Table 4.3 Descriptive Statistics of PSI Survey Questions

Question	N	Minimum	Maximum	Mean	Std. Deviation
1	69	2	6	5.49	.80
2	69	1	6	5.00	1.29
3	69	2	6	4.52	1.27
4	69	1	6	4.58	1.43
5	69	1	6	1.43	.85
6	68	1	6	2.24	1.24
7	69	1	6	2.58	1.41
8	69	1	6	2.97	1.49
9	67	1	6	4.39	1.29
10	69	1	6	1.75	.95
11	69	3	6	5.67	.61
12	69	1	6	2.32	1.24
13	69	1	6	3.74	1.46
14	69	2	6	4.46	1.24
15	69	1	6	4.52	1.26
16	69	1	6	2.16	1.15
17	69	1	6	4.06	1.41
18	69	1	6	2.25	1.18
19	68	1	6	2.04	1.01
20	68	1	6	1.94	.99
21	67	1	6	4.51	1.17
22	69	1	6	2.06	1.14
23	69	1	6	1.42	.93
24	69	1	6	1.48	.93
25	69	1	6	4.36	1.41
26	68	2	6	4.82	1.16
27	69	1	6	1.49	.95
28	68	1	6	2.97	1.27
29	68	1	6	4.56	1.20
30	68	2	6	4.91	1.05
31	69	1	6	1.93	1.03
32	69	1	6	4.19	1.55
33	69	1	5	2.06	.820
34	69	2	6	5.38	.91
35	69	1	6	1.59	1.09

In addition to the analysis of each question, the total for all three Problem-Solving Confidence factors were calculated to show the average score for the entire sample population. These averages are shown in Table 4.4 along with the total PSI score, which is used as a single, general index of problem-solving appraisal.

Table 4.4 Descriptive Statistics of PSI Confidence Factors and Total PSI Score

PSI Scores	N	Minimum	Maximum	Mean	Std. Deviation
AA	69	21	55	38.01	8.62
PC	69	5	23	12.61	4.85
CON	69	11	53	18.52	6.55
Total PSI	69	41	120	69.14	15.38

The surveyed event professionals scored low in all PSI categories showing a positive perception of their problem solving abilities. Furthermore, upon running a hierarchical cluster analysis and determining the linkage upon the groups of questions, one stood alone. Question four. “After I solve a problem, I do not analyze what went right and what went wrong.”

Overall, the results shown will add to the statistical data on event professionals. With the use of this data further research can be preformed to further the investigation and design an appropriate system to education future event professionals.

## CHAPTER FIVE: CONCLUSION

Examination of special event management as a temporary business model and how it is impacted by problem solving in its operation of temporary systems supports the necessity to better define an instructional design model for event leadership. The results of this study have defined the following conclusions of this unique group of specialists of the event industry.

Of the sixty-nine Certified Special Event Professionals that responded to all of the requested information there is a 1:2 ratio of women to men. However there is a difference in average incomes for men to women with men averaging more. Also, the average value of the events produced by these professionals' is close to \$950,000.00. It has been my experience, as an event professional, that the financial responsibility of the temporary based business entities is relevantly significant to the events' success. The ability to manage the various constructs of special events effectively and efficiently may depend on the problem solving perception the event manager has of him or herself. In addition, the minimum number of years in the industry recorded was 4 and the highest over 36. This data shows that this significant group has a healthy work history and indicates a more developed event professional. The representation of an older demographic may indicate the income level correlates to the length of time in the industry, or that better skill sets have developed and, thus they are better producers.

Understanding the applied problem solving skills of special event professionals is important in the task analysis of instructional design for improved event management education. The purpose of the Problem Solving Inventory (PSI) is to assess the

individuals' perception of their own attitude or behavior to problem solving. The PSI identifies problem solving as any goal-directed sequence of cognitive operations (Anderson, 1980) employed for the purpose of adapting internal/external demands or challenges (Sternberg & Salter, 1984). The inventory does not identify participants' problem solving skills instead it is should be taken as a reflection of the respondent's awareness and evaluation of their problem solving aptitude.

### Implications

It is my belief that this study is significant for the future of event management research. Understanding the qualities of these individuals may align new research areas to develop through this initial investigation. Who are these people that create and produce unbelievable and momentous occasions? How do they multi-task so many different types of operational processes and merge the event components into a masterful experience? Why do they take the risks they do to perform extraordinary experiences? Other than natural talent, are there similarities in this unique cross-section of hospitality and tourism providers? Do event managers share behaviors, mutually respectful in nature, with other event managers? I believe that further research may show they do.

Special events have a zero shelf life; there are no second tries or attempts to correct poor planning. The event's requirements should be as fine-tuned as possible in order to make clear and significant choices that will highly impact the performance of the event. Therefore, it is crucial for the industry professionals' perceptions of their problem solving capability be clear and positive. In addition, understanding the traits and behaviors consistent of these professionals can only help support the significance of their

presence in the workforce and their impact on tourism economics. It is essential to recognize how these individuals operate within pressure sensitive environments in order to create any correlations to their choices of career paths, selection of job opportunities, as well as, serving the ethics-based event profession. Inappropriate choices could not only generate poor quality events, but sacrifice revenue.

In this study the data collected by the inventory promotes preferences as to how the EMBOCK skills set needs to be met head-on, in regards to content, and possibly its implementation process. The behavioral indicators give confidence to the instructional design sequence and possibly medium preference of instructional implementation. The PSI scores provide practical information for developing instructional interventions or treatments in the alignment of a person's problem-solving preference and their actual skill set base (Heppner). Once a typology of problem-solving preferences are confirmed, an appropriate instructional design model), for not only content but sequencing and implementation, can be customized to suit this distinctive group of performers. Once established, longitudinal research for the increase of human performance in events can be pursued of this rare group.

The PSI was used as an investigative tool to examine the relationships between problem-solving appraisal and a range of variables related to coping. The variables represented cognitive, affective, and behavioral differences. The data collected by the inventory supports the problem solving preferences of the event producers which may effect how their EMBOCK skills will be considered and possibly implemented. The personality profile of these learners through these behavioral indicators may determine the instructional design sequencing or medium preference of instructional

implementation. The PSI scores may provide practical information for developing instructional interventions when aligning a person's problem-solving consideration, as well as, when their actual skills are analyzed in tandem.

The scores produced from the survey indicated that the research subjects were consistent in viewing themselves as being highly confident in solving problems. However, as a group, they preferred to avoid approaching problems. This tendency may result from already knowing the solution thus resulting in an avoidance of a crisis situation, or the avoidance may be due to being uncomfortable exerting assertiveness. In order to dissect this condition further, the sex, age, and education of the participants were separated for more in-depth analysis. There were no significant differences between the men and the women in regards to their problem-solving confidence (CON) or approach avoidance (AA). In addition, the age factor was not significant; however there was a more dramatic differential between the levels of education and the participants' confidence, personal control, and avoidance perception preferences.

The "level of education" data provided a significant portrait of the event professionals and their self-perceptions of problem solving. Education as predictor provided the mean scores of the three categories and produced a stronger correlation. This is a noteworthy discovery in determining the importance of education in relation to the participants' self-perception. Without further study, it may be hypothesized that the level of education either provided personal confidence due to performance accomplishments or provided the necessary knowledge to support the confidence factor. Regardless, either aspect of this educational factor would allow a more purposeful instructional design model knowing its relevance.

Instructional systems, such as the ADDIE model, allow the managers a direct and focused process to implement the Silver's event management body of knowledge. The process will self-generate solutions to problem-based decisions that occur within event production. The continuous reassessment of solutions recreates more direct results of similar situations and gives the event manager vision of new information while not having to rework past solutions. Consequently, providing increased time efficiency and effectiveness, managers can compress problem solving improvisation not only more accurately but with less costly mistakes. As human performance increases the desirability for the event producer should also increase, allowing for better performance results through increased event opportunities.

The understanding of the EMBOCK model supports only a guideline for topics of instruction event instructional design. The areas represented by the EMBOCK model determine the suggested subject areas of instruction necessary to determine a full scope of information and skills essential for managing events (Silvers). Furthermore, the ADDIE model used for instructional design should be utilized as an instructional template to insert the subject areas for a more comprehensive instructional model for special events. Approaching each subject area to be expanded into a well designed instructional system will offer event educators a significant instructional tool. Dissecting the event knowledge similar to a task analysis for instructional design will accurately align the information for analysis and development. The output of that analysis will allow the design of instruction to be scrutinized as to the medium best utilize for delivery of the instruction. The implementation and evaluation can later be addressed as to the outcome performance of the event instruction.

Limitations of the study, while few, are however significant. The number of subjects, though the highest certified in the field of special events, are only a partial representation of those certified and performing special event management as an occupation. More participants and possibly other certified professionals from other aspects of the event industry should be included in future research. Certified catering professionals with the designation of CPCE (Certified Professional Catering Executive) from the National Association of Catering Executives would be another similar group to be compared. In addition, festival and event planners, conference and convention planners, and meeting planners would all have unarguable similarities of skill sets that could further add validity to the study. The assumption of the Problem Solving Inventory as a predictor to successful special event planning would require further re-testing over time to indicate reliability of the hypothesis.

Further research is recommended for the area of study of event management, its producers, and its economic impact within the hospitality and tourism industries. A longitudinal study is highly suggested to compare financial success and event industry credibility upon embracing information technologies. The application of technology within the events industry could be a stand alone research opportunity to compare its utilization and success to other hospitality and tourism genres or, furthermore, to other industries.

In addition, an inventory of technologies should be examined and analyzed to improve on the operational needs of events. Computer software applications for project management, booking events, tracking finances may be useful if properly allocated. Increased methods of communications, such as a personal digital assistants or PDAs, may



be tools of value to the event producer. Other operational strategies that require technology or areas that could be improved by the adoption of technologies which previously did not exist need to be further analyzed for efficiency and effectiveness. The hospitality industry, as a whole, has been studied and researched for years however the special events industry has only been recognized as a stand-alone genre since the 1980's. Furthermore, the complexity of the events industry justifies the need for further educational practices and strategies to be identified and used. Standards of event education need to be interpreted to sustain a quality event management learning experience. The testing and measurement of those educational constructs developed for the event field can further support the proficiency of those learners. Competencies of the skills and event constructs involved in an educational program should reflect the necessary standards utilized in the event field. The administration and operations of special events are critical domains for successful event outcomes and the leadership skills deployed by problem-solving behaviors can help identify the human performance issues of perspective special events producers and managers.

Overall, the findings have shown that the certified specialists have a stronger sense of problem-solving confidence, though they prefer to avoid problem solving if possible, according to these findings. The item analysis of the questions showed a lower perception of usefulness for post evaluation and thus a possible time management deficiency may be irrelevant for this targeted group. Time management has been a human resource mantra for years during our corporate boom of the 1990's. An entry level course or instructional aide in time management can be adapted to event planning very easily since most event components are developed on a continuum.

Temporal based situations such as special events may have some specific business opportunities that can be replicated to fit this field even though if not all aspects can be replicated. The skills necessary to better manage events need to be task-analyzed as part of the systems based approach of instructional design, the ADDIE model, to best achieve the level of product knowledge to be developed. This analysis can determine if or whether or not that the event management instructional course design should also provide the learner the basic management skills to appropriately post evaluate any and all opportunities that could be improved upon if an event has to be repeated. Not only will post evaluation describe what happened in an event, it will also tell the provider what didn't happen. Proper evaluations procedures are a major component of the instructional design and are crucial for increased performance of special events. Evaluation complexity allows for another subject area to be developed for improved event management education.

#### Personal observations – A Qualitative analysis of the findings

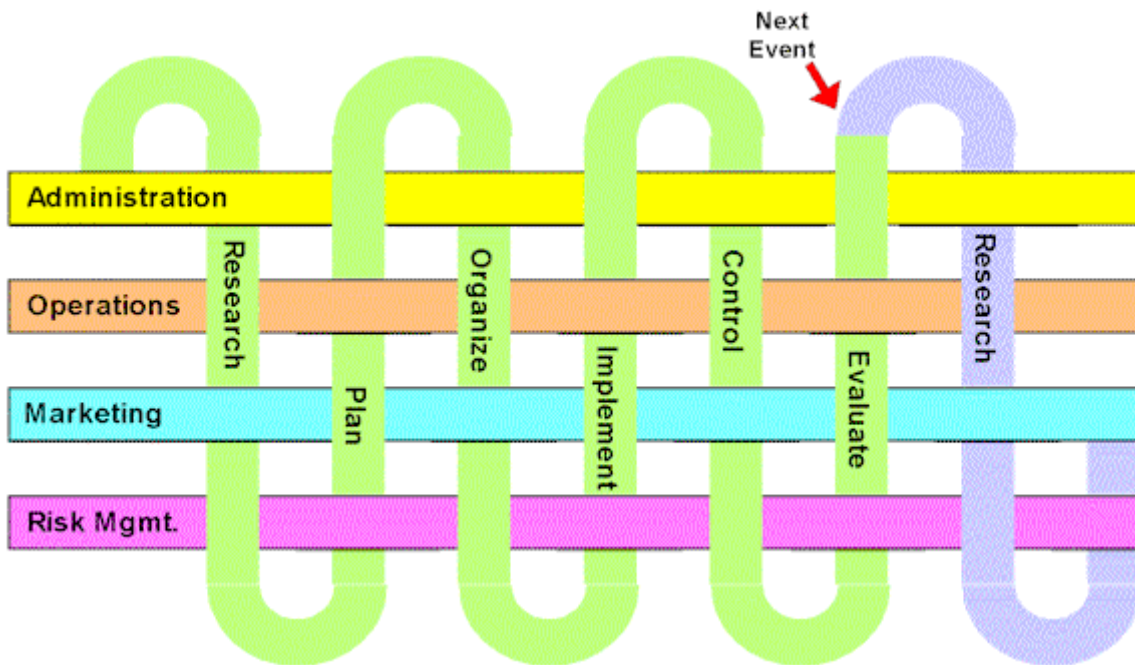
My thirty-three years of experience in the event industry has allowed me the privilege to understand the dynamics of this talented group of performance-driven research subjects. In summary when asked what this all means, it is imperative that the performance complexity of this target group be acknowledged by administrators as no other group of hospitality providers. This group provides leadership in pulling together a temporal group of workers and volunteers to accomplish remarkable, business driven, and artistically bound events. This is not a small mission to complete, nor should be expected to be accomplished by merely anyone. Business logic with artistic aptitude is

the recipe to be recognized as the primary core of these individuals. In order to perform better, as most performances, training and education must be better as well. Standards of achievements for event management need to be benchmarked within higher education to provide consistency in event education and the expected industry knowledge outcomes. Hospitality programs within colleges and universities providing courses in the event management genre should categorize the topic areas of the skills and competencies to be delivered and tested in a manner reflecting mastery.

In conclusion, this body of research has provided an in depth look at successful special event professions allowing for conclusions to be drawn about their problem solving propensity. Reflection about those managing events will allow instructors to design event management training around the problem solving experiences of event producers. This research study is a base line study and provides a foundation for the further development of an educational training model for event management. Protocol related to the specific tasks encountered by event professionals, as well as, the vast amounts of skilled knowledge necessary to design and develop special events is the beginning of identifying appropriate instruction for these professionals. It is hoped that establishing the necessary standards for training and educating event managers will increase the level of professionalism within industry, which in turn, will provide credibility and integrity to the field.

## APPENDIX A: EVENT MANAGEMENT PROCESS

## EVENT MANAGEMENT PROCESS



Source: [http://www.juliasilvers.com/embok/event\\_management.htm](http://www.juliasilvers.com/embok/event_management.htm)

## APPENDIX B: THE SILVERS TAXONOMY

## THE SILVERS TAXONOMY

### The Taxonomy of the Administration Knowledge Domain

UNITS	TOPICS		
Financial Management	Accounting / Auditing Asset Management Bid Preparation Budget Development Business Plans Cash Flow Cash Handling Procedures Change Controls	Cost/Benefit Analysis Cost Controls Cost Estimating Credit Policies Economic Impact Financial Reporting Fixed / Variable Costs Foreign Currency	Inventory Control Investments Payables & Receivables Pricing Structures Profit Objectives Purchasing Controls Rate Negotiation Resource Definition
Human Resources Management	Behavior Policies Benefits Management Conflict Resolution Discipline Employment Regulations Hiring / Induction Job Analysis Job Descriptions Labor Relations Leadership	Motivation Organizational Structure Orientation Paid Staff / Employees Payroll Management Performance Evaluation Professional Development Recognition Programs Recruitment Seasonal Staffing	Succession Planning Supervision Team Building Temporary / Casual Labor Temporary Staffing Termination Training Uniforms Union Labor Volunteers
Information Management	Briefings / Debriefings Communication Equipment Communication Planning Communication Protocols Confidentiality Agreements Database Management Documentation Procedures	Document Design Evaluation / Analysis Feedback Systems Information Acquisition Information Asset Protection Information Distribution Intelligence Gathering	Lead Retrieval Systems Library / Archives Monitoring & Reporting Presentations Photography / Videography Privacy Policies Record Keeping Procedures
Procurement Management	Bid Solicitation Change Controls Contract Management Performance Evaluation	Procurement Policies Purchasing Procedures Quality Control Reimbursement Policies	RFPs / Briefs Specifications Definition Source Definition Source Selection
Systems Management	Bookkeeping Systems Change Control Systems Communication Systems Database Systems Decision Making Systems	Document Generation Governance Integration Management Inventory Systems Knowledge Management	Maintenance Systems Procedural Manuals Purchasing Systems Reservation / Booking Systems Routing Systems Security Systems
Technology Management	Computers Digital Electronics Email & Voice Mail	Internet / Intranets Office Equipment Telecommunications	Video Web-based Wireless
Time Management	Activity Definition Activity Sequencing Change Controls Critical Path Analysis Deadline Definitions	Duration Estimation Gantt Charts Planning Tempo Production Schedules Program Agendas	Running Order Schedule Control Schedule Development Time Lines

The Taxonomy of the Operations Knowledge Domain

UNITS	TOPICS		
Audience Management	Access Controls Admission Controls Admission Systems Arrival / Departure Modes Credentialing Systems Crowd Management	Group Movements Guest Relations Housing Systems Manifests Pedestrian Traffic Flow Protocol Requirements	Queue Management Registration Systems Seating Systems Ticketing System Ushering Systems
Communications Management	Announcement Protocols Briefings / Debriefings Channel Distribution Command & Control Communication Equipment Contact Lists	Delegation Event Orders External Connectivity Guiding / Coaching Interpreter Services Notifications	On-site Communications Production Book Public Address Systems Scoring Systems Translation Services Verification Documentation
Infrastructure Management	Emergency Services Gas Services Handicap Services Housekeeping / Maintenance HVAC Systems Lighting Systems Medical Services	Parking Participant Equipment Power Services Power Distribution Recycling Seating Sewage Services	Shipping Services Telecommunications Traffic Transportation Utilities Usage Fees Waste Management Water
Logistics Management	Action Plans Ceremonial Protocol Checklists Contractor Coordination Dismantling Installation Loading Dock Management	Move-in Move-out Precedence Order Replenishing Requirements Definition Running Order Scope Definition	Staging / Marshalling Task Analysis Task Assignment Task Identification Task Interdependence Task Monitoring Terminology Agreement
Program Design Management	Activities Alcohol Management Ancillary Tours Catering Management Celebrities / Performers Certification Requirements Children's Programs	Companion Programs Competitions Educational Objectives Entertainment Management Event Components Exhibits Feasibility Analysis	Gap Analysis Learning Environments Needs Assessment Speakers / Participants Sport/Recreational Activities SWOT Analysis Theme Development
Site Management	Ceremonial Equipment Décor Environmental Controls Equipment Rentals Furnishings Maps	Mobile Facilities Perimeter Controls Signage Site Development Site Inspection Criteria Site Plans / Diagrams	Site Selection Criteria Site Selection / Contracting Staging Equipment Storage Temporary Structures Tenting
Stakeholder Management	Accountability Authenticity Client Management Committees Constituents Cultural Differences	Economic Objectives Facility Personnel Government Host Community Media Military	Officials & Authorities Participants Political Objectives Prioritized Objectives Protocol Management Tourism / Convention



			Bureaus
Technical & Production Management	Audiovisual Services Entertainment Equipment Equipment Rentals Lighting Equipment Multi-Media	Performer Equipment Projection Systems Pyrotechnics Sound Distribution Sound Equipment	Special Effects Stage Configurations Staging Requirements Technical Producers Technical Rehearsals Technicians / Engineers

The Taxonomy of the Marketing Knowledge Domain

UNITS	TOPICS		
Hospitality Management	Catering Ceremonial Equipment Client Entertainment Dressing Rooms	Guest Services Gifts / Amenities Housing Services Lounge Facilities	Ready Rooms Reception Areas Sponsor Benefits VIP Services
Marketing Plan Management	Branding Requirements Customer Intelligence Customer Needs / Benefits Customer Relationships Database Building Demographics Differentiation Image Enhancement	Loyalty / Affinity Programs Marketing Objectives Market Research Market Segmentation Marketing Mediums Marketing Messages Niche Marketing Positioning	Product Definition Product Pricing Psychographics Retention Marketing ROI Evaluation Schedule Definition Situation Analysis Strategic Marketing Target Market Definition
Materials Management	Advertising Specialties Awards / Prizes Badges / Passes / Credentials Brochures Coupons Distribution	Flyers Forms Invitations Media Kits Newsletters Posters	Printing Production Printing Specifications Programs Registration Packets Tickets Videos / CD ROMs / DVDs / MP3
Merchandising Management	Brand Management Collectables Commemoratives Concessions	Customer Service Display Distribution Licensing	Logo Wear Manufacture Packaging Souvenirs
Promotion Management	Advertising Broadcasting Ceremonies Contests / Sweepstakes Couponing Cross Promotions Direct Mail Displays	FAM Tours Giveaways Internal / External Internet / Intranet Logo Management Media Tie-ins Narrowcasting Networking	Pod-casting Product Demonstrations Product Sampling Proof of Purchase Discounts Sales Promotions Special Appearances Stunts Trade Show Participation Web-based
Public Relations Management	Disaster Recovery Disaster Response Media Conferences Media Contact Lists	Media Kits Media Previews Media Relations Media Releases	Photo Opportunities Publication Articles Requests for Coverage Spokespersons
Sales Management	Box Office Operations Cash Handling Procedures Concession Sales Coupon Redemption	Merchandise Sales Proposal Delivery Proposal Development Proposal Packaging	Sales Techniques Sponsorship Sales Ticketing Operations Web-based Sales

Sponsorship Management	Benefits Delivery Benefits Packaging Commercial Sponsorship Cross Promotions Donor & Patron Gifts	Grants & Underwriting Image Management In-kind Donations Selling Sponsorships Servicing Sponsors	Solicitation Proposals Sponsorship Kits Target Definition Target Solicitation
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The Taxonomy of the Risk Management Knowledge Domain

UNITS	TOPICS		
Compliance Management	Accessibility (ADA) Alcohol / Liquor Laws Antitrust Laws Assembly Occupancy Codes & Regulations Consent Forms Environmental Protection Exemptions	Fire Safety Food Service Codes Intellectual Property Licenses Merchandise Licensing Music Licensing Permits	Releases Safety Inspections Sanctioning Bodies Special Effects Codes Union Jurisdictions Waivers Work Permits / Visas
Emergency Management	Audience Preparation Civil Disorder Command Structure Communications Plan Crowd Control Disaster Preparedness Earthquake Evacuations Fire	Flood Hazardous Materials Medical Services Mutual Aid Agreements Power Loss Response Accessibility Response Equipment Response Services Severe Weather	Shutdown Procedures Spokespersons Terrorism Threat Assessment Training & Drills Transportation Incident Triage Vehicles & Equipment Warning Systems
Health & Safety Management	Chemical Hazards Equipment Training Fall Protection Fire Safety Systems Infectious Materials Lighting / Visibility	Manual Handling Procedures /Noise Levels Occupational Hazards OSH Requirements Pollution Protective Equipment	Safety Meetings Sanitation Systems Slip & Trip Hazards Structural Integrity Waste Management
Insurance Management	Additionally Insured Business Insurance Cancellation Certificates of Insurance Contractually Required	Errors & Omissions Event-Specific Insurance Income Loss Legal Requirements Liability Exposures	Liquor Liability Negligence / Liability Property Loss / Damage Workers Compensation
Legal & Ethics Management	Anti-Discrimination Laws Attrition / Cancellation Behavior Policies Confidentiality Contract Execution Contract Management Contract Negotiation Dispute Resolution	Employment Laws Equal Opportunity Policies Fraud Freedom of Information Act Fundraising Laws Gift Acceptance Policies Liquor Laws Not-for-Profit Laws Perquisites	Privacy Laws Public Assembly Laws Public Safety Laws Statutory Compliance Taxation Laws Terms & Conditions Traffic / Transport Laws Zoning Laws
Risk Assessment Management	Cause/Effect Analysis Contingency Plans Crisis Plans Decision Tree Analysis Documentation Fault Tree Analysis	Prevention Plans Probability / Severity Analysis Residual / Secondary Risk Response Planning Risk Analysis	Risk Fields Risk Identification Risk Mitigation Risk Monitoring Risk Resilience Risk Retention

	Hazard Mapping Incident Reporting Influence Diagram	Risk Avoidance Risk Control Risk Diffusion Risk Documentation	Risk Transference Scenario Exercise Walk-Through Inspections
Security Management	Access Control Briefings Command Center Communications Contracted Personnel Credentials Crime Deterrence Crowd Control	Deployment Detection Sweeps Emergency Assistance Equipment Escorting and Guarding Incident Reporting Incident Response Law Enforcement	Peer Security Personal / VIP Protection Private Security Personnel Property Protection Stewarding Surveillance /Vehicles Volunteer Personnel

Source: <http://www.juliasilvers.com/embok.htm>

## APPENDIX C: SURVEY LETTER OF CONSENT

Dear Certified Special Event Professional,

You are among those certified event professionals who have been selected to participate in an anonymous online event management survey. Your participation and honest answers are crucial for assessing problem solving qualities of special event professionals. The information that is being collected will be utilized in the development of an educational training module for special event managers.

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I am at least 18 years of age and completing this survey constitutes my informed consent.

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- The following questions ask about your problem solving strategies.
- This survey is completely voluntary. You may choose not to participate or not to answer any specific questions. You may skip any question you are not comfortable answering. You can decline to participate in this survey without affecting your certification. There are no anticipated risks.
- Do not take this survey if you are under the age of 18.
- The survey is anonymous and many of the questions are personal in nature. You can be assured that your responses will never be matched with your name, since IP addresses will be removed from the survey when it is submitted.
- This study examines special event professionals' problem solving abilities. The information will be used to evaluate the skills necessary of a training program and to improve special event training program for special event professionals.
- Composite data will be assessed to determine the most effective way to educate and train special event managers.
- Please answer questions honestly.
- The online survey will take approximately fifteen minutes to complete. The survey is located at <http://hospitality.ucf.edu/tester/survey.html> If you choose to participate, you can complete the survey right now, or anytime up until 1/12/2006.
- Your privacy and research records will be kept confidential to the extent of the law. Authorized research personnel, the UCF Institutional Review Board and its staff, and other individuals, acting on behalf of UCF, may inspect the records from this research project.
- The results of this study may be published. However, the data obtained from

you will be combined with data from others in the publication. The published results will not include your name or any other information that would personally identify you in any way.

- If you have any questions about this survey, please contact my office at (407) 903-8025 or [mross@mail.ucf.edu](mailto:mross@mail.ucf.edu).
- Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (IRB). Questions or concerns about research participants' rights may be directed to UCF Institutional Review Board Office at the University of Central Florida, Office of Research and Commercialization, 12443 Research Parkway, Suite 302, Orlando, FL 32826-3252. The phone numbers are 407-823-2901 or 407-882-2276.

Thank you for taking the time and thought to complete this survey. We sincerely appreciate your participation. Your time and effort in helping us gather information is greatly appreciated and will ultimately help professionals in special events meet training needs.

Sincerely,  
Mary Jo Ross, CSEP, CPCE  
Faculty  
Rosen College of Hospitality Management

**For Survey Instructions Please Click on the Accept Button**

[I Accept](#)

## APPENDIX D: REQUEST TO ADMINISTER SURVEY

Dear ISES Leadership,

Welcome back from TSE. I am forwarding you information to share with your chapter's CSEPs.

The University of Central Florida, under the research investigation of Mary Jo Ross, CSEP, CPCE, invites all CSEPs to take a brief, on-line survey for a base line study of Special Event professionals.

The Problem Solving Inventory is designed to capture behavioral preferences of problem solving of any specific group. As a Certified Special Event Professional, your valuable input will help add depth of who are event professionals.

Your support and effort is greatly appreciated.

Thank You!

<http://www.hospitality.ucf.edu/surveys/mrosswinter05pre.html>

Mary Jo Ross



## APPENDIX E: IRB APPROVAL LETTER



Office of Research & Commercialization

December 2, 2005

Mary Jo Ross  
University of Central Florida  
Rosen College of Hospitality Management  
9907 Universal Blvd./ RSH 201  
Orlando, FL 32816-1450

Dear Ms. Ross:

With reference to your protocol #05-3090 entitled, "**A Critical Analysis of Problem Solving Competencies As Practiced by Special Event Managers: A Systems Based Approach to Training Special Event Managers in Temporal Based Situations**" I am enclosing for your records the approved, expedited document of the UCFIRB Form you had submitted to our office. **This study was approved on 12/2/05. The expiration date will be 12/1/06.** Should there be a need to extend this study, a Continuing Review form must be submitted to the IRB Office for review by the Chairman or full IRB at least one month prior to the expiration date. This is the responsibility of the investigator. **Please notify the IRB office when you have completed this research study.**

Please be advised that this approval is given for one year. Should there be any addendums or administrative changes to the already approved protocol, they must also be submitted to the Board through use of the Addendum/Modification Request form. Changes should not be initiated until written IRB approval is received. Adverse events should be reported to the IRB as they occur.

Should you have any questions, please do not hesitate to call me at 407-823-2901.

Please accept our best wishes for the success of your endeavors.

Cordially,

*Barbara Ward*  
Barbara Ward, CIM  
UCF IRB Coordinator  
(FWA00000351, IRB00001138)

Copies: IRB File  
Jeffrey Kaplan, Ph.D.  
Randall Upchurch, Ph.D.

BW;jm

## APPENDIX F: SAMPLE OF PSI QUESTIONNAIRE

**The  
Problem Solving  
Inventory Sample Questions**

(This survey is not produced in entirety.)

Certifications (check all that apply):

- CSEP
- CPCE
- CMP
- Others

Sex:

Age:

Number of years in event industry:

Level of formal education:

Number of events per year:

Annual Salary Income Range:

Annual Total Event Revenue:

**Directions**

People respond to personal problems in different ways. The statements on this inventory deal with how people react to personal difficulties and problems in their day-to-day life. The term "problems" refers to personal problems that everyone experiences at times, such as depression, inability to get along with friends, choosing a vocation, or deciding whether to get a divorce. Please respond to the items as honestly as possible so as to most accurately portray how *you* handle such personal problems. Your responses should reflect what you *actually* do to solve problems, not how you think you *should* solve them. When you read an item, ask yourself: Do I ever behave this way? Please answer every item.

Read each statement and indicate the extent to which you agree or disagree with that statement, using the scale provided. Mark your responses by clicking the appropriate bubble corresponding to the number to the right of each statement.

	1	2	3	4	5	6
	Strongly Agree	Moderately Agree	Slightly Agree	Slightly Disagree	Moderately Disagree	Strongly Disagree
						1 2 3 4 5 6
1. When a solution to a problem has failed, I do not examine why it didn't work.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. When I am confronted with a complex problem, I don't take the time to develop a strategy for collecting information that will help define the nature of the problem.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. When my first efforts to solve a problem fail, I become uneasy about my ability to handle the situation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. After I solve a problem, I do not analyze what went right and what went wrong.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I am usually able to think of creative and effective alternatives to my problems.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CPP, Inc., 1055 Joaquin Road, Suite 200, Mountain View, CA 94043 800-624-1765 www.cpp.com

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*Contact Mary Jo Ross CSEP, CPCE for results and/or questions.  
 Email: <mailto:mross@mail.ucf.edu>  
 Phone: (407) 903-8025*

## APPENDIX G: SURVEY RESULTS PER QUESTION

1. When a solution to a problem has failed, I do not examine why it didn't work.

Question 1					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	0	0	0	0
	Moderately Agree	1	1.4	1.4	1.4
	Slightly Agree	1	1.4	1.4	2.9
	Slightly Disagree	4	5.8	5.8	8.7
	Moderately Disagree	20	29.0	29.0	37.7
	Strongly Disagree	43	62.3	62.3	100.0
	<b>Total</b>	69	100.0	100.0	

2. When I am confronted with a complex problem, I don't take the time to develop a strategy for collecting information that will help define the nature of the problem.

Question 2					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	2	2.9	2.9	2.9
	Moderately Agree	1	1.4	1.4	4.3
	Slightly Agree	9	13.0	13.0	17.4
	Slightly Disagree	4	5.8	5.8	23.2
	Moderately Disagree	20	29.0	29.0	52.2
	Strongly Disagree	33	47.8	47.8	100.0
	<b>Total</b>	69	100.0	100.0	

3. When my first efforts to solve a problem fail, I become uneasy about my ability to handle the situation.

Question 3					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	0	0	0	0
	Moderately Agree	3	4.3	4.3	4.3
	Slightly Agree	16	23.2	23.2	27.5
	Slightly Disagree	13	18.8	18.8	46.4
	Moderately Disagree	16	23.2	23.2	69.6
	Strongly Disagree	21	30.4	30.4	100.0
	<b>Total</b>	69	100.0	100.0	

4. After I solve a problem, I do not analyze what went right and what went wrong

Question 4					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	2	2.9	2.9	2.9
	Moderately Agree	5	7.2	7.2	10.1
	Slightly Agree	10	14.5	14.5	24.6
	Slightly Disagree	10	14.5	14.5	39.1
	Moderately Disagree	18	26.1	26.1	65.2
	Strongly Disagree	24	34.8	34.8	100.0
	<b>Total</b>	69	100.0	100.0	



5. I am usually able to think of creative and effective alternatives to my problems

Question 5					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	46	66.7	66.7	66.7
	Moderately Agree	21	30.4	30.4	97.1
	Slightly Agree	0	0	0	97.1
	Slightly Disagree	0	0	0	97.1
	Moderately Disagree	1	1.4	1.4	98.6
	Strongly Disagree	1	1.4	1.4	100.0
	<b>Total</b>	69	100.0	100.0	

6. After following a course of action to solve a problem, I compare the actual outcome with the one I had anticipated.

Question 6					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	23	33.3	33.8	33.8
	Moderately Agree	21	30.4	30.9	64.7
	Slightly Agree	14	20.3	20.6	85.3
	Slightly Disagree	7	10.1	10.3	95.6
	Moderately Disagree	1	1.4	1.5	97.1
	Strongly Disagree	2	2.9	2.9	100.0
	<b>Total</b>	68	98.6	100.0	
Missing	System	1	1.4		
<b>Total</b>		69	100.0		

7. When I have a problem, I think of as many possible ways to handle it as I can until I can't come up with any more ideas

Question 7					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	20	29.0	29.0	29.0
	Moderately Agree	18	26.1	26.1	55.1
	Slightly Agree	11	15.9	15.9	71.0
	Slightly Disagree	12	17.4	17.4	88.4
	Moderately Disagree	7	10.1	10.1	98.6
	Strongly Disagree	1	1.4	1.4	100.0
	<b>Total</b>	69	100.0	100.0	

8. When confronted with a problem, I consistently examine my feelings to find what is going on in a problem situation.

Question 8					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	14	20.3	20.3	20.3
	Moderately Agree	15	21.7	21.7	42.0
	Slightly Agree	15	21.7	21.7	63.8
	Slightly Disagree	13	18.8	18.8	82.6
	Moderately Disagree	8	11.6	11.6	94.2
	Strongly Disagree	4	5.8	5.8	100.0
	<b>Total</b>	69	100.0	100.0	

9. When confused about a problem, I don't clarify vague ideas or feelings by thinking of them in concrete terms

Question 9					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	1	1.4	1.5	1.5
	Moderately Agree	6	8.7	9.0	10.4
	Slightly Agree	10	14.5	14.9	25.4
	Slightly Disagree	12	17.4	17.9	43.3
	Moderately Disagree	25	36.2	37.3	80.6
	Strongly Disagree	13	18.8	19.4	100.0
	Total	67	97.1	100.0	
Missing	System	2	2.9		
Total		69	100.0		

10. I have the ability to solve most problems even though initially no solution is immediately apparent

Question 10					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	30	43.5	43.5	43.5
	Moderately Agree	33	47.8	47.8	91.3
	Slightly Agree	2	2.9	2.9	94.2
	Slightly Disagree	2	2.9	2.9	97.1
	Moderately Disagree	1	1.4	1.4	98.6
	Strongly Disagree	1	1.4	1.4	100.0
	Total	69	100.0	100.0	

11. Many of the problems I face are too complex for me to solve

Question 11					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	0	0	0	0
	Moderately Agree	0	0	0	0
	Slightly Agree	1	1.4	1.4	1.4
	Slightly Disagree	2	2.9	2.9	4.3
	Moderately Disagree	16	23.2	23.2	27.5
	Strongly Disagree	50	72.5	72.5	100.0
	<b>Total</b>	69	100.0	100.0	

12. When solving a problem, I make decisions that I am happy with later

Question 12					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	15	21.7	21.7	21.7
	Moderately Agree	35	50.7	50.7	72.5
	Slightly Agree	11	15.9	15.9	88.4
	Slightly Disagree	0	0	0	88.4
	Moderately Disagree	6	8.7	8.7	97.1
	Strongly Disagree	2	2.9	2.9	100.0
	<b>Total</b>	69	100.0	100.0	

13. When confronted with a problem, I tend to do the first thing that I can think of to solve it

Question 13					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	3	4.3	4.3	4.3
	Moderately Agree	14	20.3	20.3	24.6
	Slightly Agree	15	21.7	21.7	46.4
	Slightly Disagree	12	17.4	17.4	63.8
	Moderately Disagree	16	23.2	23.2	87.0
	Strongly Disagree	9	13.0	13.0	100.0
	<b>Total</b>	69	100.0	100.0	

14. Sometimes I do not stop and take time to deal with my problems, but just kind of muddle ahead

Question 14					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	0	0	0	0
	Moderately Agree	2	2.9	2.9	2.9
	Slightly Agree	20	29.0	29.0	31.9
	Slightly Disagree	9	13.0	13.0	44.9
	Moderately Disagree	20	29.0	29.0	73.9
	Strongly Disagree	18	26.1	26.1	100.0
	<b>Total</b>	69	100.0	100.0	

15. When considering solutions to a problem, I do not take the time to assess the potential success of each alternative

Question 15					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	1	1.4	1.4	1.4
	Moderately Agree	4	5.8	5.8	7.2
	Slightly Agree	11	15.9	15.9	23.2
	Slightly Disagree	11	15.9	15.9	39.1
	Moderately Disagree	26	37.7	37.7	76.8
	Strongly Disagree	16	23.2	23.2	100.0
	Total	69	100.0	100.0	

16. When confronted with a problem, I stop and think about it before deciding on a next step

Question 16					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	23	33.3	33.3	33.3
	Moderately Agree	25	36.2	36.2	69.6
	Slightly Agree	11	15.9	15.9	85.5
	Slightly Disagree	8	11.6	11.6	97.1
	Moderately Disagree	1	1.4	1.4	98.6
	Strongly Disagree	1	1.4	1.4	100.0
	Total	69	100.0	100.0	

17. I generally act on the first idea that comes to mind in solving a problem

Question 17					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	1	1.4	1.4	1.4
	Moderately Agree	10	14.5	14.5	15.9
	Slightly Agree	16	23.2	23.2	39.1
	Slightly Disagree	13	18.8	18.8	58.0
	Moderately Disagree	15	21.7	21.7	79.7
	Strongly Disagree	14	20.3	20.3	100.0
	<b>Total</b>	69	100.0	100.0	

18. When making a decision, I compare alternatives and weigh the consequences of one against the other

Question 18					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	19	27.5	27.5	27.5
	Moderately Agree	30	43.5	43.5	71.0
	Slightly Agree	9	13.0	13.0	84.1
	Slightly Disagree	7	10.1	10.1	94.2
	Moderately Disagree	3	4.3	4.3	98.6
	Strongly Disagree	1	1.4	1.4	100.0
	<b>Total</b>	69	100.0	100.0	

19. When I make plans to solve a problem, I am almost certain that I can make them work

Question 19					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	20	29.0	29.4	29.4
	Moderately Agree	34	49.3	50.0	79.4
	Slightly Agree	8	11.6	11.8	91.2
	Slightly Disagree	4	5.8	5.9	97.1
	Moderately Disagree	1	1.4	1.5	98.5
	Strongly Disagree	1	1.4	1.5	100.0
	Total	68	98.6	100.0	
Missing	System	1	1.4		
Total		69	100.0		

20. I try to predict the result of a particular course of action

Question 20					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	24	34.8	35.3	35.3
	Moderately Agree	31	44.9	45.6	80.9
	Slightly Agree	9	13.0	13.2	94.1
	Slightly Disagree	2	2.9	2.9	97.1
	Moderately Disagree	1	1.4	1.5	98.5
	Strongly Disagree	1	1.4	1.5	100.0
	Total	68	98.6	100.0	
Missing	System	1	1.4		
Total		69	100.0		



21. When I try to think of possible solutions to a problem, I do not come up with very many alternatives

Question 21					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	1	1.4	1.5	1.5
	Moderately Agree	4	5.8	6.0	7.5
	Slightly Agree	8	11.6	11.9	19.4
	Slightly Disagree	12	17.4	17.9	37.3
	Moderately Disagree	31	44.9	46.3	83.6
	Strongly Disagree	11	15.9	16.4	100.0
	Total	67	97.1	100.0	
Missing	System	2	2.9		
Total		69	100.0		

22. When trying to solve a problem, one strategy I often use is to think of past problems that have been similar

Question 22					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	23	33.3	33.3	33.3
	Moderately Agree	31	44.9	44.9	78.3
	Slightly Agree	9	13.0	13.0	91.3
	Slightly Disagree	1	1.4	1.4	92.8
	Moderately Disagree	4	5.8	5.8	98.6
	Strongly Disagree	1	1.4	1.4	100.0
	Total	69	100.0	100.0	

23. Given enough time and effort, I believe I can solve most problems that confront me

Question 23					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	49	71.0	71.0	71.0
	Moderately Agree	17	24.6	24.6	95.7
	Slightly Agree	1	1.4	1.4	97.1
	Slightly Disagree	0	0	0	97.1
	Moderately Disagree	0	0	0	97.1
	Strongly Agree	2	2.9	2.9	100.0
	<b>Total</b>	69	100.0	100.0	

24. When faced with a novel situation, I have confidence that I can handle problems that may arise

Question 24					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	45	65.2	65.2	65.2
	Moderately Agree	21	30.4	30.4	95.7
	Slightly Agree	1	1.4	1.4	97.1
	Slightly Disagree	0	0	0	97.1
	Moderately Disagree	0	0	0	97.1
	Strongly Disagree	2	2.9	2.9	100.0
	<b>Total</b>	69	100.0	100.0	

25. Even though I work on a problem, sometimes I feel like I'm groping or wandering and not getting down to the real issue

Question 25					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	3	4.3	4.3	4.3
	Moderately Agree	5	7.2	7.2	11.6
	Slightly Agree	11	15.9	15.9	27.5
	Slightly Disagree	11	15.9	15.9	43.5
	Moderately Disagree	23	33.3	33.3	76.8
	Strongly Disagree	16	23.2	23.2	100.0
	Total	69	100.0	100.0	

26. I make snap judgments and later regret them

Question 26					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	0	0	0	0
	Moderately Agree	2	2.9	2.9	2.9
	Slightly Agree	11	15.9	16.2	19.1
	Slightly Disagree	7	10.1	10.3	29.4
	Moderately Disagree	25	36.2	36.8	66.2
	Strongly Disagree	23	33.3	33.8	100.0
	Total	68	98.6	100.0	
Missing	System	1	1.4		
Total		69	100.0		

27. I trust my ability to solve new and difficult problems

Question 27					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	45	65.2	65.2	65.2
	Moderately Agree	20	29.0	29.0	94.2
	Slightly Agree	2	2.9	2.9	97.1
	Slightly Disagree	0	0	0	97.1
	Moderately Disagree	0	0	0	97.1
	Strongly Disagree	2	2.9	2.9	100.0
	<b>Total</b>	69	100.0	100.0	

28. I use a systematic method to compare alternatives and make decisions

Question 28					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	8	11.6	11.8	11.8
	Moderately Agree	21	30.4	30.9	42.6
	Slightly Agree	13	18.8	19.1	61.8
	Slightly Disagree	18	26.1	26.5	88.2
	Moderately Disagree	7	10.1	10.3	98.5
	Strongly Disagree	1	1.4	1.5	100.0
	<b>Total</b>	68	98.6	100.0	
Missing	System	1	1.4		
<b>Total</b>		69	100.0		

29. When thinking of ways to handle a problem, I seldom combine ideas from various alternatives to arrive at a workable solution

Question 29					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	2	2.9	2.9	2.9
	Moderately Agree	2	2.9	2.9	5.9
	Slightly Agree	8	11.6	11.8	17.6
	Slightly Disagree	14	20.3	20.6	38.2
	Moderately Disagree	28	40.6	41.2	79.4
	Strongly Disagree	14	20.3	20.6	100.0
	Total	68	98.6	100.0	
Missing	System	1	1.4		
Total		69	100.0		

30. When faced with a problem, I seldom assess the external forces that may be contributing to the problem

Question 30					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	0	0	0	0
	Moderately Agree	2	2.9	2.9	2.9
	Slightly Agree	6	8.7	8.8	11.8
	Slightly Disagree	10	14.5	14.7	26.5
	Moderately Disagree	28	40.6	41.2	67.6
	Strongly Disagree	22	31.9	32.4	100.0
	Total	68	98.6	100.0	
Missing	System	1	1.4		
Total		69	100.0		

31. When confronted with a problem, I usually first survey the situation to determine the relevant information

<b>Question 31</b>					
		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
<b>Valid</b>	<b>Strongly Agree</b>	26	37.7	37.7	37.7
	<b>Moderately Agree</b>	31	44.9	44.9	82.6
	<b>Slightly Agree</b>	6	8.7	8.7	91.3
	<b>Slightly Disagree</b>	4	5.8	5.8	97.1
	<b>Moderately Disagree</b>	1	1.4	1.4	98.6
	<b>Strongly Disagree</b>	1	1.4	1.4	100.0
	<b>Total</b>	69	100.0	100.0	

32. There are times when I become so emotionally charged that I can no longer see the alternatives for solving a particular problem

<b>Question 32</b>					
		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
<b>Valid</b>	<b>Strongly Agree</b>	4	5.8	5.8	5.8
	<b>Moderately Agree</b>	8	11.6	11.6	17.4
	<b>Slightly Agree</b>	12	17.4	17.4	34.8
	<b>Slightly Disagree</b>	8	11.6	11.6	46.4
	<b>Moderately Disagree</b>	21	30.4	30.4	76.8
	<b>Strongly Disagree</b>	16	23.2	23.2	100.0
	<b>Total</b>	69	100.0	100.0	

33. After making a decision, the actual outcome is usually similar to what I had anticipated.

Question 33					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	16	23.2	23.2	23.2
	Moderately Agree	37	53.6	53.6	76.8
	Slightly Agree	13	18.8	18.8	95.7
	Slightly Disagree	2	2.9	2.9	98.6
	Moderately Disagree	1	1.4	1.4	100.0
	Strongly Disagree	0	0	0	100.0
	<b>Total</b>	69	100.0	100.0	

34. When confronted with a problem, I am unsure of whether I can handle the situation

Question 34					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	0	0	0	0
	Moderately Agree	2	2.9	2.9	2.9
	Slightly Agree	2	2.9	2.9	5.8
	Slightly Disagree	2	2.9	2.9	8.7
	Moderately Disagree	25	36.2	36.2	44.9
	Strongly Disagree	38	55.1	55.1	100.0
	<b>Total</b>	69	100.0	100.0	

35. When I become aware of a problem, one of the first things I do is try to find out exactly what the problem is.

<b>Question 35</b>					
		<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
<b>Valid</b>	<b>Strongly Agree</b>	45	65.2	65.2	65.2
	<b>Moderately Agree</b>	15	21.7	21.7	87.0
	<b>Slightly Agree</b>	6	8.7	8.7	95.7
	<b>Slightly Disagree</b>	0	0	0	95.7
	<b>Moderately Disagree</b>	1	1.4	1.4	97.1
	<b>Strongly Disagree</b>	2	2.9	2.9	100.0
	<b>Total</b>	69	100.0	100.0	



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