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**FACULTATEA DE PSIHOLOGIE SI STIINTE**  
**ALE EDUCATIEI**

**A Sense of Coherence in Teaching  
Situations as Predictor of 1<sup>st</sup> Year  
Teaching Interns' Burnout**

**Doctoral Thesis**  
**Long Abstract**

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## **Abstract**

Interns are teachers in their first year of teaching, known as the induction year. Teaching has been characterized as an inherently complex occupation for experienced teachers and certainly for the interns, causing frustration and Burnout already in the interns' first steps.

The assumption underlying this research is that Sense of Coherence in Teaching Situations (SOCITS) is an inner resource that helps interns to cope with their difficulties in teaching situations and which predicts the level of Burnout serving as a buffer to Burnout.

Although Sense of Coherence has been found to be an important factor in coping with stress, as a mediator between stress and Burnout, only a few studies were conducted

among students and even fewer among first year teaching interns. Moreover, there is no research designed specifically for exploring Sense of Coherence in Teaching Situations among interns during their induction year.

Consequently, *this research seeks to examine the connection between Sense of Coherence in Teaching Situations (SOCITS) and Burnout among first year teaching interns.*

For this purpose a *Mix-Methods research approach and tools* were chosen to gather information about the connection between SOCITS and Burnout. The research was conducted in a two-phase design: (1) - Qualitative Approach: Two questionnaires SOCITS (Bracha and Hoffenbartal 2011) and Burnout (Friedman, 1999) were administered to 144 interns in their internship-workshop, without sampling, from all the interns in the various programs at colleges of education in the center of Israel. (2) - Interns who volunteered participated in a Semi-Structured interview whose questions derived from the definition of SOCITS and its components.

*The main Quantitative findings* reveal a fairly high level of SOCITS among interns. Regarding specific SOCITS components, the highest component was Meaningfulness, followed by Manageability, and Comprehensibility was lowest. In line with expectations, a negative relationship between SOCITS and the Level of Burnout was found. In addition, Manageability can predict Burnout more than Comprehensibility, and Meaningfulness will predict Burnout more than Manageability. Regarding the relationship between interns' characteristics and SOCITS and Burnout, Job position was found to be the most influential factor.

*The qualitative research* yielded manifestations testifying to a high Sense of Coherence among interns, both in general and with regard to each component. The same four factors were identified as enhancing and inhibiting the Sense of Coherence in Teaching Situations.

*The main importance of this research* is the enrichment of the existing theoretical knowledge with regard to SOC, and showing that SOCITS can be a buffer for the development of a level of Burnout among interns. The model presented regarding the four areas which can promote or inhibit the development of SOCITS explains the relationship between, SOCITS and level of Burnout. And even allows for designing a program for fostering Sense of Coherence in Teaching Situations as a coping resource for states of stress and crisis, and a buffer for Burnout among interns.

**Key words:** Interns; Induction year; Four major difficulties domains (teaching pedagogical content; Learners and their characteristics; The ecological-system organizational and The personality domain); Stress ; Burnout; Burnout among interns; SOC; SOCITS.

## **I. Introduction**

This work engages in teaching interns in their induction year and their Sense of Coherence in Teaching Situations as preventing Burnout. Research reveals that teaching as a profession is emotionally demanding and one of the more stressful occupations in recent years (Billingsley, 2004; Montgomery & Rupp, 2005; Yu, 2005; Chaplain, 2008; Shukla & Trivedi, 2008; Pithers & Soden, 1998 in Jacobs, 2010). Furthermore, interns felt that their work is characterized as solitary, and that they are required to be experts and independent in teaching from the very beginning of the year (Kardos & Johnson, 2007). They experience many difficulties during their induction year, and these difficulties cause the level of burnout already in their first year of teaching. This may lead them to a state of dissatisfaction, alienation, physical and mental health problems, and eventually – dropout (Friedman and Gavish (2007, 2010; Fisher, 2007; Chan, 2011).

However, there are interns who do not feel burnout but still enthusiastic about teaching. This situation raises the question how these findings presented a contradictory picture can be accounted for. One of the answers is that Antonovsky's (1998) Salutogenic Model, where the main concept is Sense of Coherence (SOC), which is an internal resource helping the individual withstand stressful situations.

Thus, this study focused on Sense of Coherence and examined it in the context of teaching situations and as predictors of interns' burnout. In order to check it a Mix-Methods research approach and tools were chosen.

## ***Chapter II. Theoretical Background*** (Chapters I and II in the full thesis)

### **II.1. Induction Year and Interns' Burnout**

**From a dream to reality;** from the desire to teach to its implementation, the journey to being a teacher has been a challenge both for pre-service teachers and their teachers. **Interns** around the world are teachers (who have completed their academic studies) in their first year of teaching which is known as the induction year. The situation in Israel is different. According to the Israeli Ministry of Education, interns are pre-service teachers in their fourth year of studies and in their induction year.

**Induction year** as an overall title refers both to a highly organized system of support (internship programs) and comprehensive form of a stage in professional development for the purpose of helping interns' internship and absorption in the schools. The assumption is that induction programs can be based on continuous learning and self-development via reflective practice (Fulton et al. 2005; Wong, Britton, & Ganser, 2005; Schatz-Oppenheimer et. al (2011).

**The process of teachers' development** is holistic and complex (Watzke, 2007). Different theories allow for a description of the stages of the teachers' socialization from pre-service teachers to experienced teachers, as based on the combination of three dimensions: Personal - Professional (Developing teaching capabilities and developing professional identity) - Environmental ecological. The three dimensions is accompanied by the intern's learning about the self and realizing that learning and teaching are not only intellectual activities, but they also involve emotional "work". All these together constitute the grounds where the interns grows into the construction the professional "I" – "I am a teacher!"

Teaching has been characterized as a complex occupation by its very nature not only for experienced teachers (Kane & Mallon, 2006; Tuval and Or, 2008) but also for the interns. In this respect, without guidance and direction, the interns will find it hard to do their job and be effectively absorbed in the system (Ingersoll, 2007a, 2007b). In order to meet interns' needs, teachers' **internship programs** have been developed in Israel and other countries in the world, seeking to prevent their dropout from the education system as they commence their first year of teaching. The main components of the program are: Mentor - who provide emotional and professional support, feedback and assessment, and enhance the intern's reflection and self-criticism capability, which is considered an important professional development tool (Lindgern, 2005; Gilbert, 2005; Ripon & Martin, 2006; Simpson et al.2007; Roehrig, 2008). Mentoring workshops - A training workshop is unique to Israel throughout the year, guided by teacher education institutions' instructors. The interns must attend the workshop in the induction year and a year after; Study materials and guidebooks; Formative and summative assessment (Schatz-Oppenheimer et al. Eds. 2011; Smith & Reichenberg 2008).

A review of the existing internship programs in different countries, has found similar components, most of the programs focus on internship and advancing the interns'

teaching skills but also differences among them in their intensity, frequency and nature of operation as well as in the educational environments where they are implemented (Ingersoll, & Strong, 2011).

The significant body of research in Israel regarding the support and absorption program in the induction programs testifies to the interns' satisfaction and to the fact that the internship workshop and the mentors' activities provide meaningful help to the interns in their first year of teaching (Nasser, Reichenberg and Fresco, 2006; Shimoni, Gonen & Yaakobi 2006; Raingold, 2009),

It is important to note, then, that even in a state of receiving effective support, the interns are still in a survival stage and are mostly overwhelmed by the multiple demands of the work and find it hard to work without help (McCormak & Thomas, 2003 in Abbott, et al, 2009). In other words the intern's transition from being a pre-service teacher to being an independent teacher in the field is rapid, complex and hard while experiencing highly demanding psychological processes, and the intern feels like a "Foreigner in a new country" (Strahovski et. al., 2002 in: Kizel, 2010; Pritzker, & Hen, 2010). Sunddip (2010) explains that in light of the fact that interns do not necessarily realize how complex the teaching profession can be and therefore experiencing many difficulties.

Various researchers have described the **interns' difficulties** in a variety of ways (Fuller, 1969 in Sagi and Regev, 2002). Schatz-Oppenheimer (2011) based on Vonk (1995) expanded his domains into **four major domains** which help us understand the characteristics of the difficulties: internal, external, personal and organizational-professional domains:

- **The domain of teaching pedagogical content-** in light of the fact that the fields of knowledge are vast and complex, whereas the teacher's knowledge is only partial (Hillel-Lavian, 2008), and because interns have difficulties in translating academic knowledge into active knowledge (Tam in Strahovski et. al., 2002). Consequently, the following difficulties have been identified by researchers: mastering the disciplinary knowledge, teaching skills, time management and overload and integrating technological knowledge.
- **The domain of the Pupils and their characteristics-** Difficulties in teaching in heterogeneous classes and satisfying the pupils' needs.



- **The ecological-system-organizational domain** constituting the gap between the system's and intern's expectations of each other. The interns' difficulties are expressed in a number of aspects: the relationship between the intern and the school system as an educational organization; the intern's relationship with principals, teachers-colleagues, parents and the physical conditions of the school.
- **The personality domain regarding the development of the intern's professional identity.** Interns arrive at the schools with high expectations of the system, its ways of operation and their ability to assist. In fact, they imagine all kinds of scenarios of the way in which they will act (Kizel, 2010). The gap between expectations and reality can create difficulties in personal and professional identity; misconceptions about school and teaching, lack of reconstructed misconceptions and ambiguity about yet unshaped professional identity.

The difficulties presented thus far reflect a thick web of interactions influencing each other all the time (KeizeL, 2010).

Interns' difficulties allow us to refer to the first year as "survival year". The interns experience a "reality shock" with the class reality that is so different from the way they perceived it (Murshidi, Konting, Elias, and Fooi, 2006; Melnick & Meister, 2008).

The many difficulties experienced by the interns lead them, as mentioned earlier, to emotional distress, which is expressed in feelings of stress and results in a Level of Burnout. Moreover, Kane & Mallon (2006) argue that multiple demands from the interns, the complexity of the teaching work and the increasing expectations of them, even cause stress to experienced teachers. Therefore, it is understandable that interns experience tremendous stress, as well as many complex situations which influence their considerations whether to persevere or drop out (Gujarati, 2012).

**Stress** defined in various ways: a negative emotional experience such as frustration, tension, concerns and anxiety; a tension experienced when an event is perceived as being harmful, threatening or challenging to one's feelings of well-being (Sanderson, 2004 at Jacobs, 2006; Abel & Sewell, 1999, in Zidan & Bitar, 2013) or as the inability to cope with a perceived (real or imaginary) threat (Oswalt et al. 2006). Numerous studies support pre-service teachers reports they perceive the academic life (studies and field experience) as stressful as a result of the combination of external pressures

and personal expectations (Fischl & Sagy 2009) and as requiring coping which affects a whole array of variables (Heiman, 2004). Regarding interns, Friedman (in Zuzovsky et. al, 2005) explains that there is a discrepancy between the intern's subjective perception of his or her professional capability and his or her actual success or failure. The process can be summarized as the gap between what is 'anticipated' and what is 'perceived' (Friedman 2000; Hilel-Lavian, 2012). This discrepancy creates a sense of personal stress in teaching and accounts for the formation of the level of Burnout.

**Burnout** is defined as an emotional-experiential response to stress (Shirom, 1977 in: Pritzker & Hen, 2010). Burnout, in fact, is the direct continuation of the phenomenon of stress at work, and hence deserves our attention. There are numerous approaches to define Burnout. These approaches reflect researcher's different perspectives in their attitudes to Burnout and developed from Freudenberger's pioneer definition of Burnout (1974). He defined Burnout as a state of fatigue and depletion of physical and mental strength, a state of being worn out as a result of excessive desire to reach unrealistic goals set by the individual.

This work will present three approaches to understanding the concept "Burnout", which will constitute the grounds for understanding burnout among interns in their induction year.

The first approach, Psychological-Social Approach (Freudenberger, 1974; Maslach and Jackson, 1981; Maslach-Pines, 1984, 2011). Focuses on the individual and explains the source of burnout as ongoing personal mental erosion, which includes three characteristics: Physical and mental exhaustion, de-personalization and limited self-realization (unaccomplishment). While the second one the - Organizational Approach explains burnout as the outcome of a gap between the individual's perceptions and attitude and the occupational reality in the organization and defined as Conservation of Resources theory (COR) (Cherniss, 1980; Hobfoll & Freedy, 1993; Hobfoll & Shirom, 2000; Shirom, 2003; Rafaeli et al. (2005). The third approach which combines the psychological and organizational aspects is Self-Efficacy Perception - burnout is a crisis in the sense of self-efficacy, a collapse in the individual's sense of self efficacy in the professional domain (Leiter, 1992).

Regarding the research population, the **interns' burnout** is an ongoing dynamic process which does not start in their induction year, but rather during their teacher education in the college (Gavish and Friedman, 2003, 2010). Burnout begins when many teachers perceive gaps as incomprehensible and impossible to resolve and as a result, they experience physical exhaustion, mental stress and social as well as personal problems. Understanding the interns' difficulties and feelings allows for understanding research findings pertaining to induction. In Israel and around the world, dropout rates point to 30% - 50% of teacher-education graduates dropping out from the first year to the fifth (Kfir et. al., 2006 in: Raingold, 2009; Berger and Toren, 2010; Arbiv, Elyashiv & Zimmerman, 2013).

Nevertheless, there are still interns who are happy and enthusiastic about their work (Roth, Assor, Kanat-Maymon & Kaplan, 2007). The fact that interns may feel either Burnout or enthusiasm with their work raises the question how these findings presented a contradictory picture can be accounted for. One of the explanation is Antonovsky's Salutogenic Model, where the main concept is Sense of Coherence (SOC), which is an internal resource helping the individual withstand stressful situations (Antonovsky, 1987,1979).

## **II.2. Sense of Coherence (SOC) and Sense of Coherence in Teaching Situations – (SOCITS)**

**II.2.1. Sense of Coherence - SOC** is a sense defined as a global orientation expressing the extent to which the individual has a penetrating, constant but dynamic sense of confidence in the predictable, familiar environment, and the belief that one can cope so that life events turn out for the better" (Antonovsky, 1979a, p.123). SOC is a dispositional orientation, namely, a way of assessing the world both cognitively and emotionally. It allows individuals to be flexible in selecting appropriate strategies to deal with stressors and thus enhancing behavior to a better social adjustment (Antonovsky, 1987; 1996; Strümpfer, 1990, 1995 in Jacobs 2010 pp.43, 44).

SOC includes behavioral, emotional and cognitive components pertaining to life as a whole, rather than to specific domains, situations or times. The uniqueness lies in the combination of the three components (Antonovsky, 1998): Comprehensibility -

cognitive component: Manageability - behavioral component: Meaningfulness – emotional component.

The assumption underlying SOC approach is that a person with a strong Sense of Coherence facing stressful situations will be motivated to cope (Meaningfulness), believe the challenge is understood (Comprehensibility), and believe he or she has resources to help cope with that challenge (Manageability) (Antonovsky, 1998). In many research around the world it was found that SOC can be considered as moderating the health impacts of stressful life events, meaning that SOC seems to buffer the impact of recent stressful life events (Cohen & Kanter, 2004; Richardson and Ratner's, 2005; Braun-Lewensohn, et. al. 2011).

Research dealing with students has found that SOC significantly mediates stress and Burnout (Heiman, 2004; Grayson, 2008; Austin et. al., 2010).

### **II.2.2. Sense of Coherence in Teaching Situations - SOCITS**

Since this work deals with interns and in order to understand their SOC this study use the concept of "Sense of Coherence in Teaching Situations" – SOCITS. SOCITS is a new and unique concept which was developed by the researcher and her colleague Hoffenbartal, B (Bracha & Hoffenbartal, 2011). SOCITS much like SOC is an inner coping resource. It is not a global orientation but a specific one. It defines the extent to which the teacher has a sense of confidence in the predictable, familiar teaching situations, and the belief that one can cope so that teaching situations will be managed in the best way. SOCITS has three components: Comprehensibility: (cognitive component) the extent to which the teacher perceives teaching situations as cognitively meaningful and predictable. Manageability: (behavioral component) the extent to which the teacher perceives the available resources as satisfactory in the attempt to meet the demands placed by both external and internal stimuli in teaching situations' problems. Meaningfulness: (motivational-emotional components): the extent to which the teacher feels teaching situations are emotionally meaningful and that at least some of the daily requirements pose more of a challenge than a heavy burden. As presented earlier, the concept is relatively new, and so is its use in the field of teaching interns. The hope is, therefore, that this research will enable the researcher to understand the influence of SOCITS on the interns in their induction year from their perspective. The knowledge obtained and its interpretation and

understanding will allow for action in the attempt to decrease the intensity of this stress and prevent the Burnout of interns in their induction year.

### **II.3. Gap in Knowledge**

This research was conducted among interns in Israel in their induction year and engaged in the examination of the relationship between SOCIT and the Level of Burnout. There is a gap in knowledge with regard to the population chosen for this research, the knowledge about SOC and SOCITS among interns.

In other words, unlike the large body of teachers' Burnout research there is little research in the domain of interns' Burnout (Friedman and Gavish (2007).

Although SOC has been found to be an important factor in coping with stress, as a mediator between stress and Burnout (Austin et al.,2006) only a few research studies were conducted among students (Heiman, 2004; Eriksson & Lindstrom, 2006; Oswalt et al. 2007; Grayson, 2008; Togari et. al. 2008; He, 2011) and even less among first year teaching interns. This fact creates a gap in understanding their inner coping resources, their SOC.

The research among students used Antonovskys' questionnaire (1987). Antonovskys' questionnaire was designed to check human life in general. There is no research that designed specifically for exploring the Sense of Coherence in Teaching Situations. This situation creates a gap in the knowledge about interns' SOCITS and the connection to Burnout.

## ***Chapter III. Description of The Research "A Sense of Coherence in Teaching Situations as a Predictor of First Year Teaching Interns' Burnout"***

### **III.1. Research goal**

To examine the connection between Sense of Coherence in Teaching Situations and Burnout among first Year Teaching Interns.

Thus the research was designed to answer the following research questions:

## **III.2. Research questions**

### **Quantitative question**

1. What is the relationship between "Sense of Coherence In Teaching Situations" (SOCITS) and Level of Burnout among first year teaching interns?
2. **Qualitative Questions**
3. What are the manifestations of Sense of Coherence in teaching situations, including all its components, regarding the Level of Burnout among first year teaching interns?
4. What are the enhancing factors and the inhibiting factors of Sense of Coherence in Teaching Situations, including all its components, regarding the Level of Burnout among first year teaching interns?

## **III.3. Research Hypotheses**

The research hypotheses were based on theories discussed in this work and derived from the general question.

1. Negative relationship will be found between SOCITS and Level of Burnout.
2. Manageability will predict the Burnout more than Comprehensibility.
3. Manageability will predict the Burnout more than Meaningfulness.

## **III.4. Research Variables**

**Variable No. 1 - Sense of Coherence in Teaching Situation at interns, with their three components:** Comprehensibility; Manageability; Meaningfulness in teaching situation.

**Variable No. 2 - Level of Burnout in Teaching.**

### **Interns' characteristics:**

- **Program:** primary school / junior high school / special education in Israel.
- **Year of study:** 4 with specializing in teaching / 5 specializing in teaching after graduation.
- **Job position:** homeroom teacher / Subject Matter teacher
- **Employment scope:** Partial / full

### III.5. Research Participants

The survey questionnaire was administered to 144 interns attending in teaching college in the center of the country (of Israel). All the participants in research work as teachers. Part of them (58%) still students and the rest of them (42%) are teachers who finished their academic studies.

### III.6. Research Methodology

In order to check the research questions and hypothesis a **Mix-Methods research approach and tools** were chosen (Creswell, 2009, Creswell & Plano Clark, 2011). One part of the study used quantitative research methods, administering two questionnaires to the interns: SOCITS = Sense of Coherence in Teaching Situations (Bracha & Hoffenbartal, 2011) and Burnout questionnaire (Friedman, 1999). The other part of the study was qualitative and used semi-structured interviews. Interview questions derived from the definition of the concept of SOCITS and its components

**The quantitative research** will reflect interns' SOCITS and will enable:

Statistical comparisons of two questionnaires; Examination of relationships between variables; Generalizations drawn from the sample-interns from this study to the population of interns in Israel.

**The qualitative research** will initially identify the manifestations of SOCITS, including all its components, and also the enhancing and the inhibiting factors of SOCITS, including all its components, regarding the Level of Burnout among first year teaching interns

The Mix-Methods approach in this research has an advantage because the different approaches focus on the same phenomenon and provide better understanding of the research population – interns in their first year. (Johnson & Onwuegbuzie, 2004; Creswell & Plano Clark, 2011).

### Research Design

- **Permission for Study:** The researcher received approval from the college's research authority. In addition, the researcher received a consent form each of the interviewees.
- **Sampling:** *The quantitative data* were collected without sampling, from all the

interns in the various programs at colleges of education in the center of Israel. This procedure enabled the researcher to obtain as much data as possible (Creswell, 2008). Such a procedure will allow the researcher to generalize research data to the entire population of interns (Patton, 2001, Merriam, 2009).

*The qualitative data were collected via basic mixed methods' purposeful sampling.* Interns who filled out the two questionnaires were asked to volunteer to participate in a Semi-Structured interview. This sampling was used because all of the individuals that volunteered had experienced the induction's year various characteristics (Teddlie & Yu, 2007, Sullivan et al. 2012).

▪ **Procedures:** In this study, a two-phase design enabled a better understanding of SOCITS as a coping resource dealing with Burnout:

This study was conducted in two – phases. This design enabled a better understanding of SOCITS as a coping resource dealing with Burnout: **Stage 1 - Qualitative Approach and Tools:** The two questionnaires SOCITS questionnaire (Bracha and Hoffenbartal 2011) and Burnout questionnaire (Friedman, 1999) were administered to the interns in their internship-workshop in January, 2013, a year of the induction.

**Stage 2 – Qualitative Research and tools:** The current study seeks to enhance the understanding of the interns' SOCITS in the induction year; their feelings about understanding the various teaching situations so after analyzing the Quantitative data phase two was conducted in April that year. In the second phase interns who volunteered participated in a Semi-Structured interview. The interview questions were formulated with regard to the theory of Sense of Coherence in the field of teaching and its components. The interviews were recorded and transcribed while maintaining the prevailing research ethics procedures.

▪ **Ethical Procedures:** In the beginning of the interviews the researcher let the participants know what the research was about and how information would be shared and used. In order to protect the privacy and confidentiality as part of the ethical procedures, the names of the participants were not disclosed and only the first letter of their first name was recorded. All data were kept secure in a locked cabinet and surveys were coded by numbers assigned to each intern.



### III.7. Research Paradigm

It is not enough to simply collect and analyze quantitative and qualitative data and therefore, a Mixed-Method approach was used in this study. The aim of this approach is not to replace either of these previous approaches but rather to draw on the strengths of both quantitative and qualitative research methods and minimize the weaknesses across studies. The Mixed-methods paradigm can bridge the gap between quantitative and qualitative research. This approach will enable full understanding of the phenomenon and identify its strength (Johnson & Onwuegbuzie, 2004; Creswell & Plano-Clark 2006). It can also provide more comprehensive answers to research questions, going beyond the limitations of a single approach.

Concerning this research, in order to understand the world of interns it is not enough to find out factors predicting such as SOCITS or measuring their Burnout levels by quantitative research methodologies. Interns should be allowed to talk about their world which is full of difficulties. Qualitative research methodologies will reveal the interns' personal perspective of their SOCITS and their Level of Burnout. Thus a mixed-methods paradigm was chosen in this research. The combination of all the research tools will allow for extended understanding of the phenomenon as a whole (Pritzker & Hen 2010; Creswell & Plano Clark, 2011).

The type of mixed methods design that was chosen in this research is "explanatory design" which allow the researcher explain the results in depth (Creswell, 2005, p. 521). *The main strength* of the mixed-methods approach according the literature review (Creswell, 2006, 2008; Johnson & Onwuegbuzie, 2004; Creswell & Plano Clark, 2011) which can contribute to this research: using triangulation methods statistical (from both questionnaires: SOCITS and Burnout) Quantitative results and the follow up with individual semi-structured interviews allow for a better understanding the research problem or discovering something that would have been missed if only a quantitative or a qualitative approach had been used. Also the research process the two-phase structure makes it easy to implement because the researcher in this study could conduct the two methods in clear separated stages and collect only one type of data at a time. This means that single researchers can conduct this design. In addition, because the final report can also be written in two phases, it makes it easy to describe, to report and provide a clear explanation for the readers.

### **III.8. Data Analysis**

*The quantitative research* – In order to examine the relationship between SOCITS and Level of Burnout Pearson correlation was conducted. To predict the Level of Burnout by the three components of SOCITS, a Multiple Regression was conducted with the Burnout as the criterion and the three components of the SOCITS as the predictors. The relationship between the interns' personal characteristics and SOCITS and Level of Burnout will also examine thus a multivariate analysis (MANOVA) was conducted.

*The qualitative research:* Data Analysis in this research was via content analysis based on methodology that is partly based on the data. The theory – driven thematic analysis that was chose is particularly useful when the researcher have a set of theoretical concept (Sullivan et al. 2012) as it was in this research. The purpose of the analysis is to identify the manifestations of Sense of Coherence in teaching situations, including its components, and to identify the enhancing and inhibiting factors of Sense of Coherence in Teaching Situations, including all its components, regarding the Level of Burnout among first year teaching interns. This research was conducted in four stages as proposed by Shkedi (2011): Creating the analysis categories, Reading and arranging the data, Setting categories, Updating the categories, Categorization.

### **III.9. Data Collection Methods - Validity and Reliability**

As explained in procedure of the research the data collecting in this research was in two stages: *The quantitative data* - SOCITS questionnaire (Bracha and Hoffenbartal 2011) and Burnout questionnaire (Friedman, 1999) - were collected without sampling. This procedure enabled the researcher to obtain as much data as possible (Creswell, 2008). Such a procedure will allow the researcher to generalize research data to the entire population of interns (Patton, 2001, Merriam, 2009).

**SOCITS questionnaire** is a valid and reliable questionnaire developed by Bracha and Hoffenbartal (2011). It includes 25 items on a 6-point Likert scale (Clark and Watson, 1995, Schuman and Presser, 1996 in Lam, Allen and Green, 2010) from 1 (not at all) to 6 (to a great extent). The global score ranges from 25 to 150. Higher scores indicate greater Sense of Coherence in teaching situations.

The items are divided according to the three components, namely Comprehensibility, Manageability and Meaningfulness in teaching situations.

The grading of the item that was phrased negatively has been changed to equalize it with the general direction of the scale (Item 25).

The **teachers' Burnout** scale was based on the Maslach & Jackson's Burnout inventory (1981), which was translated and adjusted to Israeli teachers by Friedman (1999). The scale contains 14 items on a 6-point Likert scale. Those items represent three sub-scales: physical and mental exhaustion, unaccomplishment, and depersonalization, and was found highly reliability and satisfactory by Cronbach's alpha.

*The qualitative data* were collected via basic mixed methods' purposeful sampling in order to answer the research questions. The semi-structured interview in this study started with broader questions, and worked towards more specific questions concerning the three components of SOCITS as needed, particularly if one of the interns tended to give only short, not very descriptive answers.

## **Chapter IV. The Results of the Research**

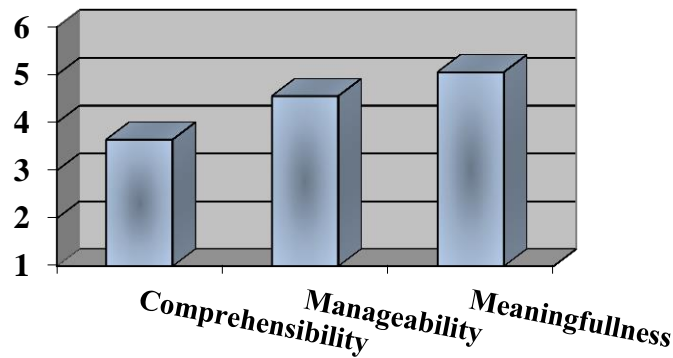
### **IV.1. Findings Pertaining to the First Research Question (Quantitative) and the Research Hypotheses**

The research question was: What is the relationship between "Sense of Coherence in Teaching Situations" (SOCITS) and Level of Burnout among first year teaching interns?

#### **A. Descriptive Statistics**

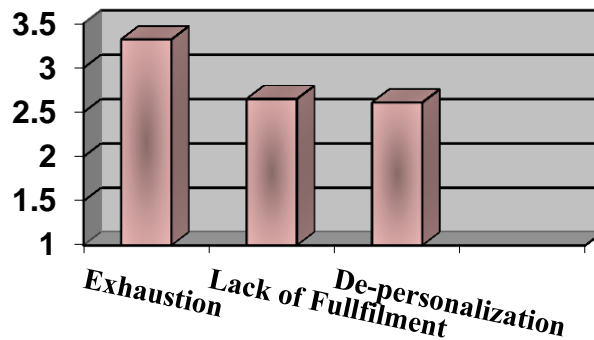
Data from the survey were analyzed by using descriptive statistics (means and standard deviations of the study variables – Sense of Coherence in Teaching Situations and Level of Burnout) and are presented in Table IV.1. The means are presented in Figure No. 1.IV. SOCITS and in figure No. 2.IV. BURNOUT.

**Table 1.IV: Means and standard deviations of SOCITS and Level of Burnout index (N=144)**



**Figure No 1.IV. Means of Components of SOCITS**

**SOCITS general score - 4.61** on a six point scale. This score indicates a fairly high level of SOCITS among interns. Regarding specific components of the SOCITS a fairly high level of Meaningfulness was found – 5.06 as well as a high level of Manageability – 4.56 and a moderate Comprehensibility level 3.36, the lowest of the three dimensions.



**Figure 2.IV: Means of Components of BURNOUT**

**Burnout general score 2.92** on a six point scale - This score indicates a low-intermediate level of Burnout among the interns in this study. The highest mean score was for the dimension of mental and physical exhaustion - 3.32; the dimension of Unaccomplishment yielded a low level score - 2.65, and the dimension of de-personalization yielded a score of 2.61, the lowest level of the three dimensions.

## B. Testing Research Hypotheses

### The First Research Hypothesis

The first research hypothesis claimed that negative relationship will be found between the general SOCITS score and the general Level of Burnout score. In order to examine this hypothesis, Pearson's correlation coefficients were calculated between the two general scores.

The results are presented in Table 1.IV.

**Table 1.IV: Correlations between the dimensions of Sense of Coherence in Teaching Situations and the dimensions of sense Burnout N=144**

Level of Burnout	Sense of Coherence In Teaching Situations			
	Comprehensibility	Manageability	Meaningfulness	General Score
Mental and physical exhaustion	-0.07	-0.17*	-0.27*	<b>-0.28*</b>
Unaccomplishment	.029	-0.22*	-0.54**	<b>-0.50**</b>
De-Personalization	.038	-0.32*	-0.40*	<b>-0.46*</b>
General Score	-.015	-0.27*	-0.50**	<b>-0.51**</b>

The research findings reveal a negative and significant relationship at a moderate intensity (-0.51\*\*) between SOCITS and Level of Burnout. This finding supports the research hypothesis it can be said that the higher the interns' SOCITS the lower the interns' Level of Burnout. Additionally, the SOCITS general score is significantly and negatively correlated to each of the three Burnout components at medium to medium-high intensity. In other words, when the level of interns' SOCITS is high, they feel less mental and physical exhaustion, they feel less unaccomplishment and less sense of de-personalization with their pupils.

### The Second Research Hypothesis

The second research hypothesis maintained that Manageability will predict Burnout more than Comprehensibility. In order to test this hypothesis, the significance of the differences between correlations was calculated between: (1) Manageability and Burnout; (2) Comprehensibility and Burnout. This calculation was done on the Burnout's questionnaire general score and each of its three components. The results are presented in Table 3.IV.

**Table 2.IV: The correlations between Manageability and Comprehensibility and Burnout's scores**

<b>Burnout</b>	<b>Comprehensibility</b>	<b>Manageability</b>
Mental and physical exhaustion	-0.07	<b>-0.17*</b>
Unaccomplishment	.029	<b>-0.22*</b>
De-Personalization	.038	<b>-0.32*</b>
General score	-.015	<b>-0.27*</b>

The Manageability score was significantly correlated with the general Burnout score and with all three Burnout components while the Comprehensibility score was not significantly correlated with all the measures of Burnout. In other words, Manageability, rather than Comprehensibility, predicts the level of Burnout in general and of Burnout components in particular. These findings confirm the second hypothesis.

### **The Third Research Hypothesis**

The third research hypothesis maintained that Manageability will predict the Burnout more than Meaningfulness. In order to test this hypothesis the significance of the difference between correlations was calculated between: (1) Manageability and Burnout. (2) Meaningfulness and Burnout. This calculation was done on the Burnout questionnaire general score and each of its three components. The results are presented in Table 4.IV.

**Table 3.IV: The correlation between Manageability and Meaningfulness and Burnout scores**

<b>Burnout</b>	<b>Manageability</b>	<b>Meaningfulness</b>
Mental and physical exhaustion	-0.17*	<b>-0.27*</b>
Unaccomplishment	-0.22*	<b>-0.54**</b>
De-Personalization	-0.32*	<b>-0.40*</b>
General score	-0.27*	<b>-0.50**</b>

The results in this table show that the correlations between Manageability and Burnout score are lower than the correlation between Meaningfulness and Burnout scores. In other words, the sense of Meaningfulness predicts Burnout more than Manageability.

In order to test the significance of differences between correlations Fisher Test of significance was conducted for each of the four indicators in the Burnout questionnaire. It was found that the correlation between the Meaningfulness and the general Burnout score was significantly higher ( $Z=3.67$ ,  $p<0.01$ ) than the Manageability and the general Burnout score. In addition, the correlation between the Meaningfulness and unaccomplishment was significantly higher ( $Z=3.67$ ,  $p<0.01$ ) than the correlation between Manageability and unaccomplishment.

**These findings do not support the third hypothesis.**

### **C. The relationship between the Interns' Personal Characteristics and SOCITS and Level of Burnout were also examined:**

In order to compare the two groups, multivariate analysis (MANOVA) was conducted. The group's Academic year Job position, Program Full time/Part time were the predictor and the SOCITS and Burnout scores were the measures. Analysis was conducted for each of the measures (SOCITS and Burnout).

- **Academic year:** Forth year - the students-teacher are still fourth year students in the academic world and at the same time they start their work as interns in their schools. Fifth year – interns have completed their academic studies and start their professional development as teachers.
- **Job position:** Homeroom teacher; Subject-matter teacher.
- **Program:** Primary School; Junior High School; Special Education.
- **Part time/full time Employment:** Full time - the Israeli interns work 36 hours, the same as the veteran teachers and those hours are defined as a full-time job. Part time - the interns work fewer hours whereby the minimum is 12 hours per week.

The table below presents the relationship between the interns' personal characteristics and SOCITS and Level of Burnout:

**Table 4.IV: The relationship between the interns' personal characteristics and SOCITS and Level of Burnout**

<b>interns' personal characteristics</b>	<b>SOCITS</b>	<b>Burnout</b>
Predictors	Measures:	
<b>Academic year</b>	No significant difference was found between the two years. In other word interns in the fourth year do not differ from interns fifth year in their level of SOCITS.	No significant difference was found between the two years. In other word interns in the fourth year do not differ from interns fifth year in their level of Burnout.
<b>Job position:</b>	Homeroom teacher reveled a higher level of Manageability than those teaching a specific subject:	Homeroom teacher were more exhausted but felt less de-personalization regarding their pupils than those teaching a specific subject.
<b>Program</b>	The three programs did not differ with regard to SOCITS.	Interns teaching in junior school showed a higher level of de-personalization than interns teaching in elementary school and in special education.
<b>Full time/Part time employment</b>	Interns teaching full-time showed a higher level of Manageability than interns teaching part time	The two groups did not differ with regard to part time/full time employment

## **IV.2. Qualitative Findings Pertaining to the Second Research Question**

### **Manifestations of Sense of Coherence in Teaching Situations -**

The second question was: What are the manifestations of Sense of Coherence in Teaching Situations, including its components, regarding the Level of Burnout among first Year Teaching Interns?

The findings will be presented on two levels:

#### **1. Sense of Coherence in Teaching Situations as a Global Concept:**

The interviews yield two main expressions of Sense of Coherence in Teaching Situations:

- **As a personal, internal, and professional component:** The interviewees reported a component which allowed them to remain optimistic, and continue teaching even though they experienced difficulties: L: has referred to the difficulties, and regards SOC as a personal and professional component which allows her to cope with teaching situations: "*Coherence strengthens me, without the Sense of Coherence I wouldn't have been able to continue doing my job, because you are lost...Without*



*coherence there is no order to things, coherence as a trait and character for a person has to be professional, too. The year is not over yet, and I hope it will have some continuation."*

▪ **As a factor which prevents the development of a Level of Burnout and helps create meaning and motivation:** The interns also report that when they feel physically and emotionally exhausted, the Sense of Coherence in Teaching Situations prevents the development of a Level of Burnout and provides motivation for persevering in the profession: **H:** *"At first it was a shock for me, no matter how much they prepared me... I was really stressed... I felt mentally emotionally exhausted, emotionally from the strain of having to remember... But it came in stages... Now I think that I am feeling better than I did at the beginning of the year... I still think I am learning so I feel the **Burnout a lot less... I still have motivation ..."***

## **2. The Components of Sense of Coherence in Teaching Situations among Interns:**

### ▪ **Manifestation of Comprehensibility in teaching situations:**

In this study we found expressions which illustrate the existence of the sense of Comprehensibility, which are represented by **variations of the word "comprehend"**. The interns expressed a feeling of Comprehensibility in regards to several domains: Different teaching situations, teaching methods, and the pupils' characteristics. In addition, they expressed understanding towards their own professional identity – their roles as teachers: **L:** *"I feel that I understand teaching situation...Earlier this year, I was in shock, total shock and now I learned to manipulate between the demands... and I really understand the process and see my progress in class.*

▪ **Manifestation of Manageability in Teaching Situations:** Analysis of the interviews reveals the interns' use expressions which represent the feeling of Manageability, such as: coping, managing, I think I can succeed. They expressed a sense of Manageability in several areas: the feeling of controlling a classroom in different teaching situations, controlling the teaching methods, expressing flexibility in the teaching process, the ability to construct personal and class-wide teaching programs. Some even expressed the ability to modify their teaching method to better fit the characteristics of the class: **K:** *"There is no doubt in my mind that I can*

*manage a class, 100%. I am really proud of myself. I teach whole classes which differ from each other, and I am flexible with the curriculum. In terms of controlling the class, I have no problem. I am meticulous and strict with discipline." H: "I think that I can **manage a class**. I try very hard to make teaching more dynamic. Many times I won't start the lessons if I see the pupils are emotional, and I usually let them express themselves, and then I cut them off and say let's study Hebrew."*

▪ **Manifestation of Meaningfulness in teaching situations:** Sense of Meaningfulness in this research was expressed in the interns' perceptions of different teaching situations as a way of life, a personal choice that satisfies them. The applied expressions indicating that they regard teaching to be a significant challenge, both in terms of advancing the pupils and their own professional progress. Moreover, From the data collection, we can see that out of 14 interviewees, 13 mentioned that **the component of Meaningfulness was the one they saw as most important of the three components of the SOCITS. A: "I get up every morning and know it is going to be a complex day of coping, because I teach an extremely difficult population...It is significant for me. That is what causes me to tell myself the day is going to be difficult, but in the end of the day it is going to be rewarding, so that is what keeps me going." KE: "Teaching, for me, is life, air to breath, I cannot live without it, it gives my life meaning. If I were to work at something that did not involve children or people It would not be meaningful... I will definitely stay a teacher next year. I hope that I would not feel the Burnout and stay a teacher for many more years, continue to influence the next generations."**

To sum up, the second research question examined which expressions illustrate the Sense of Coherence in Teaching Situations for interns in their first year. The interviews showed expressions which illustrated that the interns do feel a Sense of Coherence in Teaching Situations. In addition, clear expressions were found for each of the components of the SOCITS: Comprehensibility, Manageability, and Meaningfulness. Furthermore, we can see that the interns consider Meaningfulness the most important SOCITS component.

### **IV.3. Qualitative Findings Pertaining to the Third Research Question**

Thus the third question was: What are the enhancing and inhibiting factors of Sense

of Coherence in Teaching Situations on all its components, regarding the Level of Burnout among first year teaching interns?

Analysis of the interviews yielded four aspects which can influence the development of the components of Sense of Coherence as they are defined in the theory (Schatz-Oppenheimer, 2011). The four components are: (a) Pedagogical content; (b) Pupils' characteristics; (c) The ecological system - organizational domain; (d) Personal and professional identities.

Influence on these components may be enhancing or inhibiting. In other words Close reading of the data and analysis suggests that each of the domains can be both an enhancing and an inhibiting factor. It is possible to refer to these factors whose existence enhances SOCITS, and whose non-existence inhibits or delays the development of SOCITS.

**Table 5.IV** summarizes the four enhancing and inhibiting factors regarding each SOCITS' components as found in this research

SOCITS Components	Enhancing Factors	Inhibiting Factors
<b>Comprehensibility</b>	<p><b>Pedagogical content:</b></p> <ul style="list-style-type: none"> <li>▪ Disciplinary knowledge</li> <li>▪ Teaching skills</li> </ul>	<p><b>Pedagogical content:</b></p> <ul style="list-style-type: none"> <li>▪ Gap in Disciplinary knowledge</li> <li>▪ Deficiency in Teaching skills,</li> <li>▪ Difficulties in time management and overload</li> </ul>
	<p><b>Pupils' characteristics:</b></p> <ul style="list-style-type: none"> <li>▪ Knowledge about them and the relationship with them</li> </ul>	<p><b>Pupils' characteristics:</b></p> <ul style="list-style-type: none"> <li>▪ Lack of knowledge about pupils.</li> </ul>
	<p><b>The ecological system-organizational domain:</b></p> <ul style="list-style-type: none"> <li>▪ School support-(mentor, school's staff and other interns)</li> <li>▪ Ecological system - Parents' support</li> <li>▪ School as an Educational organization</li> </ul>	<p><b>The ecological system-organizational domain:</b></p> <ul style="list-style-type: none"> <li>▪ Difference in approaches between the school and interns</li> </ul>
	<p><b>Personal and professional identities:</b></p> <ul style="list-style-type: none"> <li>▪ Perception of love of the profession;</li> <li>▪ Reconstruction of beliefs;</li> <li>▪ Perception of the personality traits as an inner-personality component which constitutes an enhancing factor of professional identity</li> <li>▪ Integration of the interns' professional identity and personal experience</li> </ul>	<p><b>Personal and professional identities:</b></p> <ul style="list-style-type: none"> <li>▪ Misconceptions - Gap in expectations</li> <li>▪ Ambiguity About yet unshaped professional identity</li> </ul>

SOCITS Components	Enhancing Factors	Inhibiting Factors
Manageability	<b>Pedagogical content:</b> <ul style="list-style-type: none"> <li>▪ Disciplinary knowledge and love of the profession</li> <li>▪ Teaching skills</li> </ul>	<b>Pedagogical content:</b> <ul style="list-style-type: none"> <li>▪ Gap in Disciplinary knowledge</li> <li>▪ Deficiency in teaching skills, College studies and personal experience</li> <li>▪ Time management and overload</li> </ul>
	<b>Pupils' characteristics:</b> <ul style="list-style-type: none"> <li>▪ Knowledge about pupils' characteristics and the relationship with them</li> </ul>	<b>Pupils' characteristics:</b> <ul style="list-style-type: none"> <li>▪ Lack of knowledge about Pupils' characteristics</li> <li>▪ Academic and behavioral differences between Pupils and behavioral problems.</li> <li>▪ Number of pupils in class.</li> </ul>
	<b>The ecological system organizational domain:</b> <ul style="list-style-type: none"> <li>▪ School support -management.</li> <li>▪ Parents' support and the relationship with them</li> </ul>	<b>The ecological system organizational domain:</b> <ul style="list-style-type: none"> <li>▪ Lack of support from school staff</li> <li>▪ Parents non-cooperation with the teacher</li> </ul>
	<b>Personal and professional identities:</b> <ul style="list-style-type: none"> <li>▪ Personal characteristics</li> <li>▪ Shaped professional identities</li> </ul>	<b>Professional identities:</b> <ul style="list-style-type: none"> <li>▪ Misconceptions - Gap in expectations</li> <li>▪ Gap in knowledge</li> </ul> <b>Personal identities:</b> <ul style="list-style-type: none"> <li>▪ Marital status</li> </ul>
Meaningfulness	<b>Pedagogical content:</b> <ul style="list-style-type: none"> <li>▪ Disciplinary knowledge and the love of it.</li> <li>▪ Teaching skills and the love of teaching as an occupation.</li> </ul>	<b>Pedagogical content:</b> <ul style="list-style-type: none"> <li>▪ Job position as influencing teaching skills</li> </ul>
	<b>Pupils' characteristics:</b> <ul style="list-style-type: none"> <li>▪ Acquaintance with the pupils</li> <li>▪ Relationship with pupils, loving them and wishing to help them</li> </ul>	This research found no evidence of inhibiting factors regarding <b>Pupils' characteristics and the relationship with them</b>
	<b>The ecological system organizational domain</b> <ul style="list-style-type: none"> <li>▪ School staff: mentors, teachers + principal enhance a sense of satisfaction and belonging to the school</li> </ul>	<b>The ecological system organizational domain:</b> <ul style="list-style-type: none"> <li>▪ Lack of acquaintance and no relationship with the school staff and the pupils' parents</li> </ul>
	<b>Personal characteristics and professional identities:</b> <ul style="list-style-type: none"> <li>▪ <b>Personal characteristics:</b> Interns characterized as involved, caring individuals who believe in their way.</li> <li>▪ <b>professional identities:</b> Perception of the role of teaching in order to influence, as a role in a variety of areas and responsibility</li> </ul>	<b>Professional identities:</b> <ul style="list-style-type: none"> <li>▪ Perception of professional identity – Lack of a sense of achievement</li> </ul>

### **IV.3. Chapter V. CONCLUSIONS**

#### **V.1. Conclusions Drawn from the Research**

##### **V.1.1. Conclusions regarding the level of Burnout**

In many studies worldwide, a high level of Burnout was found among teachers. The finding showing that the source of most concern was the fact that a high degree of Burnout was found in interns already in their induction year and there was no difference in the level of Burnout at the beginning or at the end of the year (Gavish & Friedman, 2007; Gavish, 2009). There is even evidence to the claim they come to teaching already with that level of Burnout. This research led to a number of major conclusions of importance:

- **Burnout Level** - The uniqueness of this study, as opposed to other studies, it yielded a low to moderate level of burnout among the interns. The conclusions drawn from this research are that interns feel burnout but not to a high degree as seen up until now.
- **Burnout Components** - As opposed to other studies on Burnout among teachers in training which found personal accomplishment to be the cause of a level of Burnout, this research uncovered physical and mental exhaustion, brought on by the initial shock of the transition into the teaching profession, the reality of teaching during the induction year, and the heavy workload on the interns shoulders. The conclusion emerging from this research is that physical and mental exhaustion are factors which lead to and promote a level of Burnout.

In addition, from the interns' responses in the interviews conducted for this research, it appears their perception of self-efficacy was a way to diminish the level of Burnout. Hence, it can be concluded from this study, that self-efficacy is an important component in the interns' professional and personal development.

- **Support Given to Interns** - In this research, it was found that support is an important factor which affects the interns. Personal routine support from the mentoring teacher, from the parents and pupils and in the internship workshops in the college, eases and reduces the level of Burnout. This finding, which emerged from the interns, is compatible with the existing knowledge in other studies about the contribution of the ecological school system (school staff, parents and pupils) and thus one can conclude that intensive, comprehensive support given to interns

from all of the abovementioned sources functions as an easing factor and even reduces the level of Burnout among interns.

### **V.1.2. Conclusions Regarding the Existence of a Sense of Coherence in Teaching Situations (SOCITS) among Interns**

The findings of this study with regard to the new concept SOCITS support findings of other studies in the area of SOC. The results of the current study enabled the proposition of a number of conclusions relating to the SOCITS concept:

- **The Existence of SOCITS** – The innovation presented in this study is the examination of the interns' Sense of Coherence in a specific situation, in this case, various teaching situations. In light of the findings, it becomes apparent that teaching interns also feel a Sense of Coherence in relation to specific teaching situations, as they were questioned about them in a questionnaire designed to examine this feeling. The findings emerging from the questionnaire and the personal interviews testified to the high SOCITS level. The conclusion drawn is that it is that SOCITS, too, is a personal internal component in teaching interns and becomes a resource for them in coping with stressful situations and crisis in teaching. Another conclusion reached in this research pertains to the components of the SOCITS concept (Comprehensibility, Manageability and Meaningfulness). The component of meaningfulness was found to have the most significant influence of all three SOC components, and as such, influences the interns' ability to cope with stressful situations and Burnout. We can summarize by saying the SOC does indeed exist in teaching situations among interns and the component that most affects its development is the sense of Meaningfulness by the interns.
- **The Correlation between SOCITS and Burnout** – This work confirmed the research question, in that an inverse correlation was found between SOCITS and a level of Burnout. The conclusion that can be drawn from this research is that SOCITS is indeed a resource for the interns' coping with the stressful situations and crises they experience during their induction year and even serves as a buffer to Burnout; in other words, the higher the SOCITS, the lower the level of Burnout.
- **The correlation between SOCITS components and Burnout** – This question was posed: which of the SOCITS components predicts Burnout. It was found that Manageability could better predict burnout more than Comprehensibility and

Meaningfulness can predict Burnout more so than Manageability and Comprehensibility. In light of this, one can conclude that a **sense of Meaningfulness** is a source of strength in SOCITS and as such, it can predict Burnout among interns better than the components of Manageability or Comprehensibility.

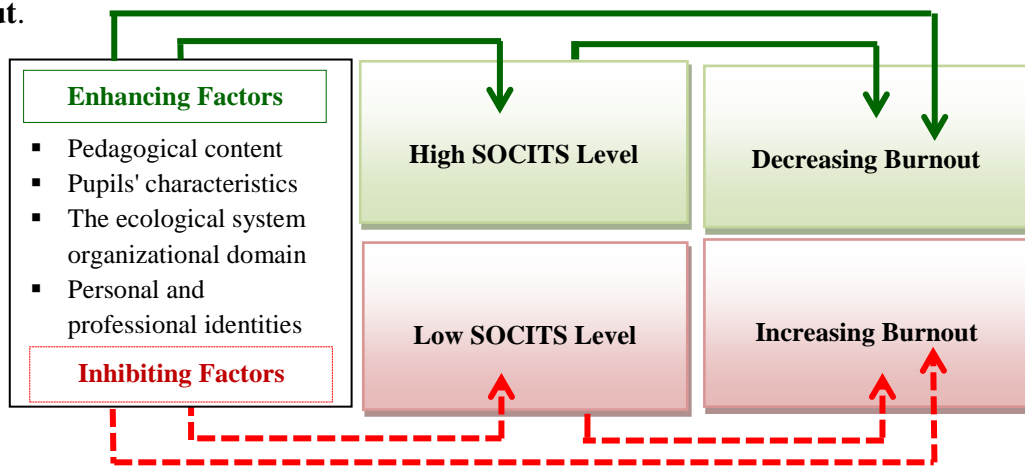
- **The Correlation between the Characteristics of the Interns in Their Induction Year and SOCITS and Burnout** – This study examined the correlation between the characteristics (Academic year, Job position, Program, Employment scope) of the interns during their induction year and SOCITS and Burnout. *The academic year* was not found to be of influence on SOCITS and Burnout. From this, one can conclude that the Sense of Coherence which develops throughout the years is an internal component which is influenced not only by this specific year, but rather by the cumulative experiences of the interns up to this point. The characteristic that was found to influence SOCITS and Burnout the most was *job position*. The conclusion drawn is that the role of the teacher is of importance in creating SOCITS and a level of Burnout. The conclusion reached pertaining to the *program* in which the interns studied, was that the program has no effect on SOC but it does influence the level of Burnout. From this, it can be concluded that the program cannot provide an explanation for the development of SOCITS. As far as level of Burnout is concerned, it can be concluded that what causes interns in junior high school to feel Burnout is not their study program, but rather their job position. *Full time/Part Time Employment* -Whether the intern position is full or part-time it has an effect on SOCITS, but not on Burnout. This unexpected finding can be explained via another finding pertaining to SOCITS. It was found that sense of Manageability is higher among interns working full time. The conclusion drawn from this finding is that the SOCITS serves as a buffer to Burnout. In other words, the higher the interns' sense of Manageability the lower the level of Burnout experienced by interns when they work full time. One can summarize and draw conclusions that the characteristics of the interns influence SOCITS and Burnout, but only partially.

- **The Factors Influencing the Development of SOCITS**

In this study, four major areas were found to be influences in the development of SOCITS: pedagogical content; pupils' characteristics; the ecological system -

organizational domain; personal and professional identities. Up until now, these areas, including all their components, have been described in professional literature as factors in the development of Burnout, whereas, in the current research, the conclusion is that **those areas can promote or inhibit SOCITS as a general feeling and in terms of each of its components.**

In light of the findings brought of the current research, it becomes possible to present a model (presented in the Discussion chapter) which describes SOCITS and its development as a factor in preventing Burnout. **This model presents the connection between the four areas related to the realm of teaching and SOCITS and Burnout.**



## V.2. General Conclusions

**Regarding the phenomenon of Burnout** – previous studies have shown that the phenomenon of Burnout among teachers is so widespread that it causes much concern in the field of education. From the findings of the current research it is clear that Burnout is not culture dependent and results mainly from class management, discipline problems and workload. Thus, the findings of this research shed light on the phenomenon of burnout and can contribute towards expanding our knowledge of the phenomenon.

**Pertaining to the population**, the conclusion drawn from this research is the dual status of teaching interns as teacher education students, and as interns teaching in the system, and the role they play as homeroom teachers in Israel may be a factor that contributes to their level of Burnout. Those interns who are also homeroom teachers face high demands which are both time consuming and emotionally demanding as was reported by the interns in this research in their responses to the Burnout



questionnaire and in the interviews. These characteristics explain their feelings of physical and mental exhaustion.

**Regarding SOCITS**, Antonovsky (1987) and other researchers (Eriksson and Lindstrom, 2008) have argued that a Sense of Coherence is not culture-dependent this means that in all cultures SOC could be considered as a potential protector against stress. This research used the term Sense of Coherence and expanded it to apply to the situation of teaching specifically. The conclusion drawn from this research is that when additional studies are conducted among interns, the results of the current study can be a source of comparison for the SOCITS among interns of teaching the world over.

**With regard to the aims of the current research:** An inverse correlation was found between SOCITS and burnout. SOCITS is a part of a person's general Sense of Coherence, so it can be concluded that the results of this research apply to other cultures as well.

In summary, the results of the current study can be generalized with regard to the phenomenon of Burnout and as to SOCITS being a buffer for the development of a level of Burnout.

**As for the model presented in this work** - The qualitative findings that emerged from the research questionnaires enabled the construction of a new model. The conclusion drawn from this research is that this model presents the connection among the four characteristics of the difficulties the interns face during their induction year to be factors either promoting or inhibiting the development of SOCITS and the connection to the level of Burnout.

### **V.3. The Importance of the Research**

The main importance of this research is in the examination of the concept of Sense of Coherence in Teaching Situations as a predictor of Burnout among interns in their induction year. The main research findings indicated, as stated, that there is an inverse relationship between SOCITS and burnout. The contribution of the research is reflected in the theoretical, methodological and applied levels

### **The theoretical contribution emerging from this research focuses on:**

- **Enrichment of the existing theoretical knowledge with regard to the concept of SOC** - that is, new knowledge is created which allows for relating to the concept of SOC not only as a global sensation pertaining to a person's life but also with reference to specific teaching situations and the interns' population. New knowledge pertaining to SOC refers to both the structure of the concept itself and its dynamics with other concepts and phenomena. As for the structure of the concept, the study showed that the term has three components, each of which has a specific meaning. As the dynamics of the concept, the research shows that there is a positive influence of SOCITS expressed in preventing the development of a level of Burnout.
- **Reaffirming the concept of SOCITS** (Bracha and Hoffenbartal, (2011) - The theoretical contribution of the concept of SOCITS can be examined and reaffirmed through further research, which will examine its influence in different work situations of other similar service providers such as social workers, teachers, and doctors. Knowledge that may be gained from such studies will contribute to both understanding Sense of Coherence in work situations among service providers and to the prevention of the sense Burnout characterizing these populations.
- **Constructing a model of the development of SOCITS** – the research findings allow for the development of a theoretical model at the center of which are four areas that promote or inhibit the development Sense of Coherence in Teaching Situations. The model also allows for explaining the relationship between these areas, SOCITS and level of Burnout.

### **The Methodological Contribution of the Research**

- **Burnout Questionnaire** (Friedman (1999) - The results of this research strengthen the validity of the questionnaire and show justification for the distribution of the three components: Physical and mental exhaustion, unaccomplishment, and De-personalization, each with its significance.
- **SOCITS Questionnaire** - This research made a pioneer use of the SOCITS questionnaire previously developed (Bracha & Hoffenbartal, 2011). The questionnaire was found to be both valid and reliable in this research as well. The results reinforce the questionnaire, and justify the examination of each of its components, as well as with regard to the term SOCITS (as preferred by

Antonovsky) not only as a general concept but also to its components and to view the term as multidimensional, thereby being able to conclude that the examination of each element in the questionnaire allowed the researcher to uncover rich detailed information about the interns. Moreover, the conclusion reached from this research that the SOCITS questionnaire is indeed an effective tool for examining the interns' Sense of Coherence, specifically in teaching situations.

**The Applied Contribution of this Research focuses on the following topics:**

- Reducing the intensity of the interns' level of Burnout
- Development Sense of Coherence in Teaching Situations through a structured program for preventing level of Burnout
- For the interns - Understanding the factors that promote and inhibit the development of SOCITS, and examining them with respect to the process of their development will allow the interns to emphasize the promoting factors, reduce the effect of inhibiting factors and thus have a higher Sense of Coherence.
- For the mentoring teachers and education policy makers – the applied implications allow for designing a program for fostering Sense of Coherence in Teaching Situations as a coping resource for states of stress and crisis, and a buffer for Burnout.

**Research Limitations**

The current research is a preliminary study that examines SOCITS as a buffer to Burnout. Because the study was conducted at one college in Israel, its results may reflect the research interns themselves. To avoid this limitation the participants were not sampled, but rather all interns participate in this year participated in the research. Furthermore, the two valid and reliable questionnaires were used in the research, and could provide a broader picture of the research topics: SOCITS, Burnout and the relationship between SOCITS and Burnout. Moreover, the fact that the Burnout and SOC are global phenomena allows for the assumption that despite the limitations of this research its findings can be valid and reliable beyond its somewhat limited scope. In addition, the mixed methods approach chosen for this research allowed for increasing understanding of the phenomenon. In other words, listening to the voices of the interns, authentically revealed the relationship between SOCITS and Burnout,

increased the understanding that the processes that interns' undergo, and has grounded the quantitative findings of this research.

## **Recommendations for Future Research**

The uniqueness of this research is in its attempt to expose SOCITS as an internal resource which prevents Burnout. This is a new finding in the field of educational research with respect to interns in their induction year. Therefore further research of this issue is required so as to ground knowledge with respect to SOCITS, the causes of its development and its relationship to Burnout. This research yielded a number of topics worthy of future research:

1. Examining the existence of SOCITS via the designated, with respect to interns in various colleges in the country and among teachers at different levels of seniority and the connection to level of Burnout. Also, examining it with regard to populations engaging in the provision of service and suffering Burnout like the teachers' population.
2. Examining the proposed model in relation to factors that promote or inhibit the development of a level of Burnout in teaching situations with regard to different populations.
3. Examining the concept of SOCITS and its relation to the concepts related to the world of teaching such as a professional self-image and concepts related to SOC such as teachers' resilience, Flow and SOCITS.
4. Conduct research accompanied by a program for the development of SOCITS among teaching interns and even among new teachers. In Israel, at the end of the induction year, the interns are referred to as novice teachers and they continue to receive instruction in colleges also in the second and third years of teaching. Therefore, such research will help a examine the concept and its contribution to the interns development

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