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SPIRITUALITY AND SOCIAL CLIMATE IN THE CONTEXT OF AN  
INTERNATIONAL LEARNING COMMUNITY

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A thesis

Presented to

The School of Graduate Studies

Department of Higher Education and Student Development

Taylor University

Upland, Indiana

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In Partial Fulfillment

of the Requirements for the Degree

Master of Arts in Higher Education and Student Development

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by

Laura M. Rodeheaver

May 2009

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**Higher Education and Student Development  
Taylor University  
Upland, Indiana**

CERTIFICATE OF APPROVAL

MASTERS THESIS

This is to certify that the Thesis of

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entitled

Spirituality and Social Climate in the Context of an International Learning Community

has been approved by the Examining Committee for the thesis requirement for the Master  
of Arts degree

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## ABSTRACT

The spiritual development of college students has recently become a greater concern for student affairs professionals in higher education. This study was designed to discover if the social climate of living-learning environments would contribute to the spiritual development of college students. More specifically, this study was conducted with freshmen students involved in an international living-learning community and tested the students' perceptions of their social climate, along with their growth in spiritual maturity over a semester. Freshmen students experiencing traditional on-campus living arrangements were the control group for this study. Social climate was defined as the unique characteristics of a specific group environment. Rudolph Moos' Group Environment Scale was utilized in order to measure the social climate of the living-learning environment. Craig W. Ellison's Spiritual Maturity Index assessed the change in spiritual maturity over the semester. Spiritual maturity was defined as possessing Christ-like characteristics. It was predicted that the study abroad students would experience higher levels of social climate dimensions and that these dimensions would be a predictor for growth in spiritual maturity. Thus, it was anticipated that the study abroad students would have greater growth in spiritual maturity than students on-campus. The subscales of independence and self-discovery were more statistically significant within the study abroad students than the on-campus students. The independence subscale was also a

significant predictor of student spiritual maturity. Students in the international living-learning community did not have higher growth in spiritual maturity than on-campus students as predicted. However, it was found that the students participating in the study abroad program entered their freshmen year significantly more spiritually mature than on-campus students. These results raise significant implications for student affairs professionals working in study abroad programs. Specific programming and mentoring relationships may need to be directed toward students at a higher spiritual maturity level.

## ACKNOWLEDGMENTS

*This I recall to mind,  
Therefore I have hope.  
The LORD's lovingkindnesses indeed never cease,  
For His compassions never fail.  
They are new every morning;  
Great is Thy faithfulness.  
Lamentations 3:21-23*

The past two years have been a process guided by God's love and goodness. He has enabled me to experience the joys of a masters program and face the challenges, such as writing a thesis, that are such a significant part of that journey. To Him I owe everything. Through the descriptions in Psalm 77 of God's powerful works, I have been reminded of His ever-present friendship. The end of the Psalm says:

Thy way was in the sea,  
And Thy paths in the mighty waters,  
And Thy footprints may not be known.  
Thou didst lead Thy people like a flock,  
By the hand of Moses and Aaron. Psalm 77:19-20

Often the comfort of God's presence came through the love and help from many Moses's and Aaron's during these past two years. These faithful friends joined me in the journey of following God's often invisible footsteps through the mighty waters. They have encouraged, guided, and united with me in trusting that the path will not run out until we

together reach God's home, fully restored. It is to these friends, mentors, and family members that I dedicate this thesis, with glory given to God for providing these tangible blessings along the way.



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## CHAPTER 1

### INTRODUCTION

The Carnegie Foundation once “lamented the loss of community and common purpose in higher education” (Lenning & Ebbers, 1999, p. 20). Since then, similar cries have been heard inside, as well as outside, the academy. Should higher education have a common purpose and community as the Carnegie Foundation seems to suggest? If so, how can a common purpose be forged to benefit the students? Should gaining a college education simply help graduates procure jobs, or should a college education play a role in forming graduates into persons of character as well? The American College Personnel Association declares that “legislators, parents, governing boards, and students want colleges and universities to reemphasize student learning and personal development as the primary goals of undergraduate education” (American College Personnel Association [ACPA], 2008). Focusing on these goals would lend to the desired outcome of producing students who are able to morally, as well as professionally, excel after college.

Students’ personal development includes the exploration and understanding of themselves as spiritual beings. Astin (2004) highlighted the importance of spirituality in the formation of students, saying:

Giving spirituality a central place in our institutions will serve to strengthen our sense of connectedness with each other . . . . This enrichment of our sense of community will not only go a long way toward overcoming the sense of fragmentation and alienation that so many of us now feel, but will also help our students to lead more meaningful lives as engaged citizens, loving partners and parents, and caring neighbors. (p. 41)

A community giving credence to spiritual connectedness will enrich the students' experiences that will enable, according to Astin, students to be a powerful influence in their communities. Educational communities that attend to students' spiritual nature will provide environments that impact and develop the whole person. If this is the end goal for the academy, what does a spiritually connected community include in order to challenge and support students not only in their intellectual development, but in their spiritual development as well?

Research has shown that a Christian college environment positively influences student faith formation and that peer relationships play a significant role in this process (Ma, 2003). Other research has revealed the significant effect peer interaction has on student learning outcomes and personal development (Astin, 1993). However, little empirical research has explored the impact of environment on the spiritual development of students. Acknowledging the importance of peer relationships on the faith formation of students, it is logical to assume that the social climate of a spiritually connected community may have significant impact on students' spiritual growth. Therefore, the purpose of this study is to investigate a living-learning community in an international context and to assess what elements of the social environment are most beneficial to the

spiritual development of the participating college students. In pinpointing environmental elements essential to spiritual development, student affairs professionals may continue to learn how to effectively develop holistic students prepared to powerfully engage their communities.

## CHAPTER 2

### LITERATURE REVIEW

#### *Faith Development*

##### *Theories of faith development.*

Theories of faith development have examined how individuals make meaning out of their environment. Parker (2006) explained that “faith, as the universal human activity of meaning-making, is rooted in certain ‘structures’ (inherent in human interaction) that give shape to how humans construe and relate to self and world” (p. 337). Two theorists, James Fowler and Sharon Daloz Parks, have done significant work on the faith development of adolescents. In both of their theories, relationships and communities have played a significant role in the development of adolescents. Fowler (2001) defined his Faith Development Theory as “a theory of the journey of the faithful or religious self, with its companions and life challenges, toward increasingly reflective and responsible relation to and grounding in the Holy” (p. 165). These theories have examined how relationships, commitments, and one’s heart focus shape an individual’s faith identity (Fowler, 1981).

Parks (1986) emphasized the need for young adults to be surrounded by a mentoring community. For Parks, “it is the combination of the emerging truth of the

young adult with the example and encouragement of the mentor, grounded in the experience of an ideologically compatible social group, that generates the transforming power of the young adult era” (p. 89). Parks revealed through her theory that relationships are valuable and continuously pointed to the significant influence a mentor may have on a young adult’s life. Love (2001) mentioned the compatibility of Parks’ theory with the living-learning community. These elements of community, mentors, and relationships found in models of living-learning communities have continued to surface in higher education literature pertaining to spirituality.

In the following literature and throughout the rest of the study, the terms ‘spiritual development’ or ‘spiritual formation’ will be used to discuss the concept of faith development. These terms were chosen because they appear to be more broadly understood and used currently in spirituality literature.

*Related research.*

Recent research validated the importance of implementing practices related to spiritual development in the college environment by discovering the beneficial impact of mentor and peer relationships, as well as crises, on spiritual development. In 1999, Love and Talbot approached the subject of spiritual development in the area of student affairs. The authors called for student affairs professionals to recognize how spiritual values play a role in three areas: student development, community, and exploration of information (Love & Talbot, 1999). In 2001, Love contributed another article summarizing the work of several theorists focusing on spiritual development. When speaking of Fowler and Parks, Love called student affairs professionals to understand and implement the theories when interacting with their student populations.



Two years later, The Higher Education Research Institute (HERI) pioneered a study that revealed many students were already involved with spirituality, with more than “three-fourths ‘searching for meaning/purpose in life,’ and similar numbers report that they have discussions about the meaning of life with friends” (Astin, et al., 2003, p. 4). With these statistics, it is clear spirituality is a considerable aspect of students’ lives. Hindman (2002) also affirmed that “spirituality is not something we have to add to the curriculum, or infuse into students’ lives like a missing additive or a diet supplement. It is already there. The question is what spirit shall be affirmed or nurtured” (p. 181). As with most aspects of the developmental process, it is important for mentors and professors to be involved in the process by providing knowledgeable support in order to build a safe place for students to discover and grow in their own faith.

Many Christian colleges and universities have emphasized the affirmation and nurture of student spirituality as an essential priority. They have infused their curriculum with elements intended to foster Christian formation in the attempt to “develop godly young people of character to serve God through obedience to God’s calling and faithfulness to their vocations” (Ma, 2003, p. 322). Ma conducted a study to assess Christian higher education by looking at students’ perception of their own spiritual formation as a result of their college experience. Ma used surveys to determine the most influential nonacademic items in a college experience. It was found that the Christian college experience positively impacted college student spiritual formation with “peer relationships [having] the highest impact on the spiritual progress of students” (Ma, p. 333). Ma’s results support a positive fulfillment of the Christian university’s mission.

The impact of the Christian college experience was studied at several schools in the Council of Christian Colleges and Universities (Holcomb & Nonneman, 2004). The research assessed the spiritual development of students using Fowler's Faith Development Scale. Relying on both qualitative and quantitative data, the research pointed to crises in students' lives as the drivers of spiritual development. These crises were explained in three levels as "prolonged exposure to diverse ways of thinking, extensive multicultural exposure, and general emotional crisis" (Holcomb & Nonneman, 2004, p. 100). The right college environment must be structured to "foster the appropriate mix of challenge balanced with communal support" in order to be "the most conducive to developing a higher level of cognitive, social, and spiritual functioning. Too much of either challenge or support effectively stunts development" in students impacted by crises (p. 102).

Bryant and Astin (2008) furthered this research by specifically regarding the impact of spiritual struggles on college students. It was found that "spiritual struggle – a phenomenon affecting a sizable proportion of college students – is associated with a number of student characteristics and perceptions, college environments and experiences" (p. 20). With such diverse settings in which spiritual struggle can occur, the authors of this study discussed the importance for student affairs professionals to be open about spiritual struggles, and to listen and encourage students' own engagement with the issues.

As student affairs professionals have begun to contemplate the aforementioned research findings, they have begun to consider many other factors that may influence college student spiritual development. It was found in the previous literature that peer relationships, crises, and mentor relationships all played an important part in college

student spirituality (Astin, et al., 2003; Ma, 2003; Holcomb & Nonneman, 2004; Bryant & Astin, 2008). What influences on students' spiritual development have yet to be discovered? More importantly, can an educational environment intentionally designed to foster meaningful relationships lead to an increase in student spiritual development?

### *Social Climate*

As the pioneering social psychologist in environmental literature, Kurt Lewin suggested that the interaction between a person and their environment determines the person's behavior (1936). This idea of connecting behavior and environment was later applied to the college setting. If Lewin's suggestion is correct, it is important to understand the effects of environment in higher education because it is a determinant of student behavior. Kaiser (1975) further explored the college living environment. Kaiser believed that "properly designed campus spaces convert potentiality to actuality through the medium of evoked student experience" (Kaiser, p. 33). Therefore, understanding students' perceptions of their experience is both important and necessary to adequately evaluate college environment (Kaiser, 1975).

Social climate is a segment of the university environment. More specifically, social climate is the "personality [*sic*] of a setting or environment, such as a family, a workplace, a social or task-oriented group, or a classroom. Each social setting has a unique 'personality' that gives it unity and coherence" (Moos, 2003, p. 1). Rudolph Moos has widely explored the concept of social climate and through a great deal of research articulated how social climate affects students, organizations, and various small groups. Moos (2003) reported that social climate "affects each person's behavior, feelings, and adaptation. Specifically, the social climate can have an impact on an individual's morale

and well-being, aspirations and achievement, self-understanding, impulse control, and so on” (p. 1). Through his research, Moos divided social climate into three descriptive dimensions: relationship dimensions, personal growth or goal orientation dimensions, and system maintenance and change dimensions (p. 5). Environments combine varying levels of each dimension to create the environment’s overall unique social climate.

Moos (2003) explained the outcome of social climate by identifying four determinants, which are “the general context,” “physical features,” “organizational structure and dominant tasks and policies,” and “the kinds of people in a setting” (p. 16). Groups of various identities are shaped and influenced by unique determinants creating the group’s self-perceived social climate. The resulting social climate impacts individuals specifically in regards to the three structured dimensions. The described influences are as follows:

- “Relationship dimensions influence each person’s commitment to the setting.
- Personal growth or goal orientation dimensions channel the direction of change.
- System maintenance dimensions affect how much change occurs and the personal costs of it.” (p. 16)

Also, Moos expressed two important findings: satisfied people are found within settings that emphasize the relationship dimensions and “cohesion in particular strengthens the influence of personal growth dimensions” (p. 16). In addition to these specific concepts, numerous studies have been conducted to determine the impact of varying social climates (Toro, Rappaport, & Seidman, 1987; Meredith, 1987).

Moos' social dimensions have been utilized within distinct social groups. Toro, Rappaport, and Seidman (1987) reported significant differences in the group climates of mutual help groups and psychotherapy groups. Their results suggested that people need group environments with specific characteristics in order to experience satisfaction within those respective group experiences. The suggestion for future research was to explore how social climate may impact an individual's well-being (Toro, Rappaport, & Seidman, 1987). Meredith (1987) revealed that the dimensions of social climate that significantly impacted student satisfaction in "seminar-format classes" were leader support and group cohesion (p. 79). Cohesion was also found to be a predictor of "*personal growth and development, over-all evaluation of course content, and self-evaluation of personal effort, motivation and commitment ratings*" (p. 81). Based on these findings, it would be advantageous to design academic communities that included elements of cohesion and leader support in order to produce the greatest personal growth in college students.

#### *Living-Learning Communities*

Recently, living-learning communities (LLCs) have been designed to increase relational interaction among college students, as well as with faculty members. As previously stated, creating environments that foster higher levels of cohesion, leader support, and other dimensions with positive links to student satisfaction would be ideal for encouraging student growth. In keeping with this goal, LLCs have been found to produce several positive outcomes in college students (Stassen, 2003). Lenning and Ebbers (1999) defined a learning community as "an intentionally developed community that will promote and maximize learning" (p. 22). Living-learning communities, by design and purpose, have naturally provided an environment that if intentionally

exploited could lead to an increase in students' personal growth, including spiritual development.

*Irish Studies Program as a living-learning community.*

The focus of this research was on the unique environment of the Irish Studies Program (ISP), which mimics deliberate components often found in LLCs across higher education. One such component, significant peer interaction, has been found to be substantial in college student development. Astin (1993) discovered that the peer group is the “single most powerful source of influence on the undergraduate student’s academic and personal development” (p. 3). ISP shares with most LLCs a heightened interaction with peers socially and academically, as well as with student affairs professionals and faculty members directly involved with the LLC.

Expressed within the ISP handbook is the intended goal that students are “active participants in an intentionally Christ-focused living and learning community” (Irish Studies Program, 2007, p. 5). In particular, the ISP uses the same concept of integrating faith and learning as does the main campus in our study. Freshmen students attend ISP for their first semester of college. For these students in the beginning of their college experience, there is “an unusual depth of intellectual and spiritual engagement. The Irish Studies Program becomes for students an initiation to a conversation about faith and learning” (Irish Studies Program, 2007, p. 5). Therefore, the ISP offered the perfect opportunity to research an academic community focused on relationships with an element of spirituality for evidence of certain social climate elements and their relationship with spiritual development in college students.

### *Study Abroad*

The Irish Studies Program is also a study abroad experience. Therefore the outcomes of this research may be affected by the program's location in Ireland. The ISP participants will differ from other students on campus, because they are participating in not only a LLC, but also a community set in the context of Ireland. In 1984, Kauffmann and Kuh presented a paper regarding their research on the longitudinal impact of study abroad programs on college students. In the research findings, students "increased in their interest in reflective thought ... and in their feelings of well being" (p. 11). Kauffman and Kuh's study suggested that student development was impacted by the study abroad experience. Another study by Nash (1976) found that students experiencing a year in France did grow in areas of personal autonomy and differentiation of self as a result of their experience (Nash, 1976).

That the experience of studying abroad has been shown to influence students' personal development is important to this present study. The study abroad program in Ireland is established and run by faculty from the U.S. institution, which sets it apart from other study abroad programs where individual students find themselves isolated within a new culture in an international school.

### *Summary*

As reflected in this review of the literature, understanding and promoting college student spirituality has become an emerging priority for many colleges and universities. More and more studies are being conducted on how students view spirituality, how spirituality influences them, and how important it is for the academy to seize this opportunity to aid students in their spiritual development. Also being revived is the idea

of living-learning communities as a means to create more positive student outcomes.

LLCs provide increased interaction with peers and with faculty, which has been found to positively influence students' social and academic success in college (Stassen, 2003). The intent of this study was to examine the social environment, as defined by Moos, of the ISP and the spiritual development of the individual students involved, in order to discover significant interactions between these two areas of study.

#### *Purpose and Rationale for Research Hypotheses*

The purpose of this study was to determine if students perceive differences in the social climate of their respective living-learning environments and if the social climate was related to the students' spiritual development. The study intended to discover if a living-learning community environment naturally contained specific dimensions of social climate that encouraged personal growth and also, if these dimensions influenced the spiritual development of college students. Research was conducted on two distinct and separate environments of a Christian liberal arts institution: the Irish Studies Program and students participating in domestic on-campus housing in the same institution. All students were in their first semester of their freshmen year. Social climate and change in spiritual maturity were measured in both groups over one semester.

#### *Specific Research Hypotheses*

##### *Hypothesis 1.*

The ISP group will score significantly higher on the subscales of cohesion, leader support, expressiveness, independence, and self-discovery than on-campus students. There are no predictions for the remaining social climate subscales: task orientation, anger and aggression, order and organization, leader control, and innovation.



*Hypothesis 2.*

There will be a positive significant relationship between the change in spiritual maturity of all students and their perception of the social climate subscales: cohesion, leader support, expressiveness, independence, and self-discovery in both groups. There are no predictions for the remaining social climate subscales: task orientation, anger and aggression, order and organization, leader control, and innovation.

*Hypothesis 3.*

There will be significantly greater growth in spiritual maturity as measured by the Spiritual Maturity Index for the ISP students than the on-campus students.

## CHAPTER 3

### METHODOLOGY

#### *Purpose and Rationale for Research Hypotheses*

The purpose of this study was to determine if social climate dimensions influenced college students' spiritual development. More specifically, the study was conducted with students involved in an international living-learning community, along with a control group of students experiencing traditional on-campus living arrangements. It was predicted that students studying in Ireland would experience higher levels of social climate dimensions and that these social climate dimensions would be a predictor for growth in spiritual maturity. Thus, it was anticipated that the students in Ireland would have greater growth in spiritual maturity than students on-campus.

#### *Participants*

The participants included 28 college freshmen involved in the Irish Studies Program (ISP) and a control group of 33 randomly selected freshmen students residing on the university's main campus. There were 18 female and 10 male students studying in the Irish Studies Program. On-campus students returned 25 usable questionnaires with 12 female and 13 male participating students. Cluster sampling was used to randomly select the control group from amongst previously established freshmen orientation groups that

function for the first semester. The on-campus students were instructed to complete all instruments based on their experience in the residence hall, not their respective orientation groups. Only the ISP group had the treatment of a study abroad program that mimicked a LLC. Consent forms were signed by all students. The consent forms for the two groups differed only by conditions of participation (see Appendixes A and B).

### *Instruments*

#### *Spiritual Maturity Index.*

Craig W. Ellison's (1983) Spiritual Maturity Index (SMI), based upon "evangelical Christian theology", defines and measures a spiritually mature person to be "self-principled and is able to enter into many full relationships with others," serve others, be intimate with God, and establish regular disciplines of faith (Hill, 1999, p. 201). The SMI is a 30 question survey in which participants rate their answers on a 6-point Likert scale ranging from 'strongly disagree' to 'strongly agree'. The items are self-report and are based upon Ellison's view of spiritual maturity as a developmental process.

The SMI is a short survey that takes relatively little time to complete. The scale has high reliability, with a reported internal consistency of .87 in one study and .92 in another (Hill, 1999). The SMI connects well with spiritual development research in testing individual's spiritual maturity with the understanding that "spiritually mature Christians demonstrate Christlike [*sic*] character within the setting of Christian community" (Tan, 1995, p. 56). Ellison's scale measures several individual characteristics that would define Christ-like character.

Ellison's (1983) SMI defines and measures spiritual maturity based on the following specific concepts:

1. Don't need institutional structure to express Christianity.
2. Religious beliefs/practices are a spontaneous part of everyday life.
3. Doesn't need social support (agreement) to maintain faith and practice.
4. Not narrow-minded/dogmatic but do have firm beliefs.
5. Giving rather than self-focused.
6. Had definite purpose for life related to spiritual life.
7. Sacrificial.
8. Close relationship with God/control identity - service of God.
9. Actively using spiritual gifts.
10. Lives evidence fruits of spirit, compatible with Scripture.
11. Ultimate goals – spiritually focused.
12. Able to accept 'negatives' of life as part of God's plan/not bitter.
13. Forsakes self-gain if the gain violates or detracts from spiritual values/principles.
14. Spends times studying the Scripture in-depth.
15. Has active desire to share personal faith.
16. Tries to love neighbor as self.
17. Has a live, personal prayer life.
18. Perceives movement toward spiritual maturity (Ellison, 1983). (as cited in Tan, 1995, pp. 87-88).

Questions are structured around these 18 constructs and with strong internal consistency describe the level of spiritual maturity individuals have achieved on their spiritual development journey.

*Group Environment Scale.*

Moos created several scales to measure social climate for various group settings. The scales include: Family Environment Scale, Work Environment Scale, Classroom Environment Scale, University Residence Environment Scale and the Group Environment Scale. Each of the Social Climate scales has three basic forms. The Real Form (Form R) measures a person's perception of the current social environment. The Ideal Form (Form I) measures a person's perception of an ideal environment. The Expectations Form (Form E) measures a person's expectations of the environment they are about to enter (Maloney, 1989).

Specifically, the Group Environment Scale (GES) measures the social climate of groups with three dimensions: Relationship, Personal Growth, and System Maintenance and Change. The Relationship dimensions are measured by the cohesion, leader support, and expressiveness subscales. This set of subscales assesses personal relationships in a setting. More specifically, the subscales assess how involved people are in a setting, how much they help each other and how spontaneously they express feelings (Moos, 2003).

The Personal Growth or Goal Orientation dimensions address ways in which the environment encourages or stifles personal growth. Within this dimension, independence, task orientation, self-discovery, and anger aggression subscales assess the basic directions of personal growth and self-enhancement occurring in the environment (Moos, 2003).

Last, System Maintenance and Change dimensions evaluate how orderly and organized the environment is, how clear it is in its expectations, how much control it maintains, and how responsive it is to change (Moos, 2003). The subscales are order and organization, clarity, leader control, and innovation. Table 1 describes the GES

dimensions with subsequent subscales, as well as an example item from the questionnaire (Moos, 2002).

Table 1

*Group Environment Scale Subscale Descriptions and Example Items*

---

Relationship Dimensions

Subscale	Description and Example Item
1. Cohesion	the members' involvement in and commitment to the group and the concern and friendship they show for one another <i>Example Item: There is a feeling of unity in this group.</i>
2. Leader Support	the amount of help, concern, and friendship the leader shows for the members <i>Example Item: The leader spends very little time encouraging members.</i>
3. Expressiveness	how much freedom of action and expression of feelings are encouraged in the group <i>Example Item: When members disagree with each other, they usually say so.</i>

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Personal Growth Dimensions

Subscale	Description and Example Item
4. Independence	how much the group encourages independent action and expression among members <i>Example Item: Individual talents are recognized and encouraged in this group.</i>
5. Task Orientation	the emphasis on completing concrete, practical tasks and on decision making and training <i>Example Item: There is very little emphasis on practical tasks in this group.</i>
6. Self-Discovery	how much the group encourages members' discussions of personal problems <i>Example Item: Personal problems are openly talked about.</i>
7. Anger and Aggression	the extent to which there is open expression of anger and disagreement in the group <i>Example Item: Members are often critical of other members.</i>

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System Maintenance and Change Dimensions

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Subscale	Description and Example Item
8. Order and Organization	the formality and structure of the group and the explicitness of rules and sanctions <i>Example Item: The activities of the group are carefully planned.</i>
9. Leader Control	the extent to which the leader directs the group, makes decisions, and enforces rules <i>Example Item: The group is run in a pretty loose way.</i>
10. Innovation	how much the group promotes diversity and change in its own functions and activities <i>Example Item: Things are pretty routine in this group most of the time.</i>

---



The Relationship dimensions is of specific interest as it “measure[s] how involved people are in a setting, how much they help each other, and how openly they express feelings” (Moos, 2003, p. 7). Constructs from both the Relationship dimensions and Personal Growth dimensions were studied as these dimensions “appear to be growth-producing, because they help to maintain and enhance personal and social development”, which is of interest in a study examining the effects of social relationships on spiritual growth (Moos, p. 26).

The GES includes 90 True or False statements regarding an individual’s perspective on the surrounding group environment. The items are scored from 0 to 9 for individual’s perceptions and combined to find the group means for each subscale under the three dimensions. Higher scores reveal a stronger perception of those particular subscales within the group’s social climate. The internal consistency and test-retest reliability were configured for each subscale. Both measures produced respectable ranges with the internal consistency ranging from .62 (independence subscale) to .86 (cohesion subscale) and test-retest reliability ranging from .65 (independence subscale) to .87 (anger and aggression subscale). The GES has been found helpful to evaluate “social environments of task-oriented, social, psychotherapy, and self-help groups” (Moos, 2002, p. 1). It is recommended with a group of 28, such as the ISP students, that only 50 percent of the group needs to be randomly selected to adequately determine the group’s social climate (Moos, 2003). The ISP group readily adapts to the uses of the GES because of its social focus, as a result of close living quarters and shared educational experiences.

*Procedure*

Before leaving for Ireland, the ISP students took the Spiritual Maturity Index (SMI). The students were given the SMI pretest, as well as a note card with their name and a corresponding ID number. Both the ID card and the tests were handed back when the students were finished. This was used to protect the anonymity of the students. Two weeks later the SMI pretest was given to students involved in two randomly selected orientation groups. A total of 33 surveys were collected from both groups.

The SMI posttest was administered to the ISP group during their last week in Ireland. Their leaders administered this survey, as well as the Group Environment Scale (GES). The on-campus students were invited to a pizza party as an incentive to complete the same two surveys. Five students participated in this event, while another 21 students were sought out personally at their residence halls at the most convenient times for the students. A total of 25 usable on-campus surveys, which included the SMI pretest, the SMI posttest, and the GES, were collected. All 28 ISP students returned all three completed instruments.

The GES was given to the ISP students with the instructions to answer the questions regarding their Irish studies group, while the control group was instructed to answer based upon their specific residence hall living arrangements. All questionnaires were administered in paper form. Demographic information collected on the SMI included sex, date of birth, and age became a Christian.

Table 2

<i>Participant Demographic Information</i>		
ISP		
Sex	Age	Years as a Christian
18 Female	$x = 19$	$x = 11.73$
10 Male		
On-Campus		
Sex	Age	Years as a Christian
12 Female	$x = 20$	$x = 9.17$
13 Male		

### *Specific Research Hypotheses*

#### *Hypothesis 1.*

The ISP group will score significantly higher on the subscales of cohesion, leader support, expressiveness, independence, and self-discovery than on-campus students. There are no predictions for the remaining social climate subscales: task orientation, anger and aggression, order and organization, leader control, and innovation.

#### *Hypothesis 2.*

There will be a positive significant relationship between the change in spiritual maturity of all students and their perception of the social climate subscales: cohesion, leader support, expressiveness, independence, and self-discovery in both groups. There are no predictions for the remaining social climate subscales: task orientation, anger and aggression, order and organization, leader control, and innovation.

#### *Hypothesis 3.*

There will be significantly greater change in spiritual maturity as measured by the Spiritual Maturity Index for the ISP students than the on-campus students.

*Data Analysis*

Three analyses were run to determine the accuracy of the hypotheses. The SMI pretest was added as a covariate to control for a baseline in hypothesis three.

*Hypothesis 1.*

A multiple analysis of variance (MANOVA) was used to test the social climate of the ISP group compared with the social climate of the on-campus group.

*Hypothesis 2.*

A simple correlational analysis was used to compare the growth in spiritual maturity and the perception of social climate in each group.

*Hypothesis 3.*

An analysis of covariance (ANCOVA) was used to test the change in spiritual maturity of the ISP group compared to the change in spiritual maturity of the on-campus group with the group and pretest as covariates.

## CHAPTER 4

### RESULTS

The results collected from the Irish Studies Program (ISP) included 18 females and 10 males for a total number of 28 students. The on-campus control group included 12 females and 13 males for a total of 25 freshmen students. Using Statistical Package for the Social Sciences (SPSS), the following analyses were run to discover the validity of the three hypotheses.

#### *Hypothesis 1*

The ISP group will score significantly higher on the subscales of cohesion, leader support, expressiveness, independence, and self-discovery than on-campus students. There are no predictions for the remaining social climate subscales: task orientation, anger and aggression, order and organization, leader control, and innovation.

A 2 (Group) x 2 (Sex) Multiple Analysis of Variance (MANOVA) was run to assess differences in change on the five group environment subscales (see Table 3).

Overall no significant ( $p < .05$ ) interaction effects were found. In addition, no significant ( $p < .05$ ) main effects were found between sexes. When comparing the ISP with the on-campus control group, there were significant differences on the independence ( $p < .05$ ) and self-discovery ( $p < .05$ ) subscales.

In order to further interpret the source of this significance, descriptive statistics were run to determine the mean score for both independence and self-discovery in each group. The score for ISP students on independence was  $x = 55.46$ , while the on-campus independence score was  $x = 49.60$ . The self-discovery score for ISP students was  $x = 62.00$ , while the on-campus self-discovery score was  $x = 57.60$ . The self-discovery construct is more significant given that  $p < .01$ . Therefore, hypothesis one was partially satisfied with the ISP group containing greater levels of the independence and self-discovery subscales than the on-campus students.

Table 3

*Multiple Analysis of Variance for GES Subscales*

Source	<i>Df</i>	<i>F</i>	<i>P</i>
Between Subjects			
Sex			
cohesion	1	.437	.512
leader support	1	2.945	.092
expressiveness	1	.210	.649
independence	1	.246	.622
self-discovery	1	1.391	.244
Group			
cohesion	1	1.641	.206
leader support	1	.441	.510
expressiveness	1	1.592	.213
independence	1	6.011	.018
self-discovery	1	8.289	.006
Sex * Group			
cohesion	1	.145	.705
leader support	1	.012	.914
expressiveness	1	3.187	.080
independence	1	.193	.662
self-discovery	1	.424	.518
Error			
cohesion	49		
leader support	49		
expressiveness	49		
independence	49		
self-discovery	49		

### *Hypothesis 2*

There will be a positive significant relationship between the change in spiritual maturity of all students and their perception of the social climate subscales: cohesion, leader support, expressiveness, independence, and self-discovery in both groups. There are no predictions for the remaining social climate subscales: task orientation, anger and aggression, order and organization, leader control, and innovation.

Two simple linear regressions were run for each group with five predictors (cohesion, leader support, expressiveness, independence, and self-discovery) and one criterion (change in spiritual maturity) (see Table 4). In the ISP group, independence was a significant predictor ( $p < .05$ ) in predicting change in spiritual maturity. The other predictors were non-significant with  $p = .12$ , though the percentage of variances was somewhat large at 31% ( $R^2 = .31$ ).

Table 4

*Regression Analysis for Group Environment Variable Predicting Change in Spiritual Maturity in Ireland Students*

Variable	<i>B</i>	<i>SE B</i>	$\beta$
		ISP	
Cohesion	-.446	.688	-.192
Leader Support	-.601	.540	-.303
Expressiveness	-.283	.359	-.148
Independence	.986	.416	.567*
Self-Discovery	-.547	.633	-.182

*Note.*  $R^2 = .31$ ;  $p = .12$

The linear regression run for the on-campus students showed the predictors were non-significant with  $p = .59$ . The percentage of variance was also not significant at 17% ( $R^2 = .17$ ). None of the predictors were significant ( $p < .05$ ) in predicting change in spiritual maturity (see Table 5).



Table 5

*Regression Analysis for Group Environment Variable Predicting Change in Spiritual Maturity in On-campus Students*

Variable	<i>B</i>	<i>SE B</i>	$\beta$
			On-Campus
Cohesion	.265	.317	.202
Leader Support	.237	.247	.216
Expressiveness	-.195	.276	-.169
Independence	-.566	.311	-.482
Self-Discovery	-.071	.344	-.045

*Note.*  $R^2 = .17$ ;  $p = .59$

*Hypothesis 3*

There will be significantly greater change in spiritual maturity as measured by the Spiritual Maturity Index for the ISP students than the on-campus students.

In order to compare groups on their change in spiritual maturity, a 2 (Group) by 2 (Sex) Analysis of Covariance (ANCOVA) was run to determine the effects of group and sex on the total change in spiritual growth over the semester (see Table 6). The SMI pretest was entered as a covariate in order to control statistically for the effect of baseline scores. These baseline scores were found to be significant ( $p < .05$ ), indicating that baseline scores were impacting change scores.

To further examine this effect, an independent samples T-Test was used to compare groups on their change in spiritual maturity. The ISP students did score significantly ( $t = 2.06, 51$ ;  $p < .05$ ) higher on the pretest (ISP:  $x = 136.77$ ; On-campus:  $x = 127.17$ ) revealing that students are entering the study abroad program with higher levels of spiritual maturity. As a result of these analyses, it could not be determined that the ISP students did experience a significantly greater change in spiritual maturity than the on-campus students.

Table 6

*Spiritual Maturity Index Change*

Source	<i>Df</i>	<i>F</i>	<i>p</i>
SMI Total Pretest	1	5.850	.019
Group	1	.507	.480
Sex	1	1.094	.301
Group x Sex	1	.252	.618
Error	48	----	----

## CHAPTER 5

### DISCUSSION

The purpose of this study was to research students' perceptions of the social climate within a study abroad learning community. Social climate was defined as the unique characteristics of a specific group environment. The study also examined change in spiritual maturity over a semester and whether it is affected by the social climate of the learning community. Spiritual maturity was defined as possessing Christ-like characteristics.

#### *Hypothesis 1*

The Irish Studies Program (ISP) students had significant differences in the subscales independence and self-discovery on the Group Environment Scale (GES) compared to the on-campus group. Therefore, the first hypothesis was partially fulfilled. The nature of the ISP group may explain these results. The ISP students are attending college for the first time within a completely new cultural setting. The students' interaction with Ireland and exploration of a large international city may contribute to these experienced feelings of independence, which Moos (2002) described as "how much the group encourages independent action and expression among members" (p. 1). This first semester of college was also spent in intense relationship with approximately thirty

other students. This was significantly different from on-campus students' interactions with hundreds of other students. Based on Moos' explanation of self-discovery as "how much the group encourages members' discussion of personal problems," the students' isolated living arrangement in Ireland may have more naturally led to members of the study abroad group discussing personal problems with one another (p. 1). The limited options for close friendships and helpful counsel may have led to greater reliance upon personal discussion within the ISP group environment.

The subscales of cohesion, leader support, and expressiveness were not found to be significantly higher in the study abroad group. Concepts such as cohesion and leader support are emphasized through residence life and valued as a part of the on-campus environment. One interpretation of this data is that the on-campus students were experiencing an environment that anecdotally identified itself as strong in relational dimensions. For the on-campus students, the new college environment may have been perceived as very high in cohesion and leaders support in comparison to their high school experience.

### *Hypothesis 2*

Moos (2003) mentioned that goal orientation dimensions or personal growth dimensions "appear to be growth-producing, because they help to maintain and enhance personal and social development" (p. 26). From this statement, it is not surprising that independence, as an element of the goal orientation dimensions, would have a strong relationship with the change in spiritual maturity for the ISP group. It is not known why the other subscales of cohesion, leader support, expressiveness, and self-discovery did not have a significant relationship with change in spiritual maturity. Moos explained that the

interaction between the dimensions can influence overall growth. Specifically, a “strong emphasis on any one of the three domains may inhibit growth, depending on the amount of emphasis on the other two domains” (p. 26). Moos mentioned later that “an emphasis on independence in families fosters aspirations and achievement, but may inhibit interest in religion” (p. 27).

The overall environment created by the interaction between the social climate subscales influences the perception of individuals within the group. For instance, Moos expressed the need to ensure the presence of task orientation, organization, and interpersonal relationships to establish individual’s satisfaction with the group (Moos, 2002). In this example, regardless of the presence of some subscales, without a certain measure of task orientation, organization, and interpersonal relationship, group members will not be satisfied. Moos expounded on this concept of interactive effects by stating “powerful settings can both produce growth and cause distress. Specific settings or aspects of settings often produce both positive and negative changes” (p.27).

It is still not known if a greater level of cohesion and leader support would increase change in spiritual growth as spirituality literature indicates. The results revealed that there was not a significant relationship between change in spiritual maturity and cohesion, leader support, and expressiveness. However, it is possible that there might have been a more significant relationship between these effects if the level of cohesion, leader support, and expressiveness were higher.

### *Hypothesis 3*

Students entering the ISP were significantly higher in spiritual maturity than students on campus. The significance of the baseline affected the data analysis of

hypothesis three and led to the inability to meaningfully compare the change in spiritual maturity of both groups. However, it is significant to consider that freshmen students choosing to study abroad their first semester of college are measuring consistently higher on the spiritual maturity index. There is a chance that students who are significantly gifted have greater confidence and motivation to engage in a completely new environment for their first semester of college. The ISP students may be more intrinsically motivated than on-campus students to pursue situations that would encourage spiritual growth.

Another interpretation of the data may point to the option that the ISP students' spiritual maturity levels actually impacted the GES subscales of independence and self-discovery. However, when investigating the literature it was found that "group members' socio-demographic and other personal attributes are only minimally related to their perceptions of the group social climate" (Moos, 2002, p. 22). Dissimilar types of people can be involved within a group and still perceive similar group characteristics (Moos, 2002). Therefore, it is not likely that spiritual maturity is a predictor for certain aspects of social climate.

### *Limitations*

Student expectations of their first college semester may have affected their perception of their environments. Neither student group took Moos' Expectation Form (Form E), and it is possible that this might have revealed the students' expectations of their new social environment. As previously mentioned, this would offer an explanation as to why a significant difference between groups on social climate was not discovered. Moos (2002) summarized several studies that found that "expectations and interpersonal

orientations of individuals may help to predict their perception of the climate and behavior in a group” (p. 33). Also, the narrowed focus of the study on certain subscales of the GES may have limited the ability to interpret the interactive effects of all the subscales within the social climate.

The GES was a valuable tool in accessing perceived overall social climate of the group, but it was limiting in that it did not address specific instances that affected students’ perception of the environment. When using self-perception, it is difficult to connect known causes of spiritual development with students’ perceptions of social climate.

Another significant limitation was the size of the research sample. The selected size was beneficial in assessing the GES subscales, but detrimental to running several desired data analyses. The low significance of both models in the ANOVA analysis revealed an issue of sample size.

#### *Implications for Research*

Further study should utilize Moos’ Form E to clearly assess differences in groups’ social climates and the role expectations play in the future perception of an environment. Also, a more intricate look at the interaction of all subscales within the GES would help to determine if certain interactions could be the perceived cause of the relationship or lack of relationship between social climate and change in spiritual maturity.

Future studies could also qualitatively examine the presence of known causes of spiritual development, such as mentor relationships and personal crisis, during students’ experiences in living-learning communities (Holcomb & Nonneman, 2004; Bryant & Astin, 2008). It would be helpful to determine if these experiences or relationships would

impact the individual's perception of the surrounding social climate or change in spiritual maturity.

In further studies, assessment could be done on the change in spiritual maturity over a longer time span. Also, it would be interesting to compare these results of freshmen study abroad students with upper classmen who choose to study abroad. Are these students as spiritually mature upon entering? Did independence and self-discovery play as crucial a role in their faith development over the semester?

### *Implications for Practice*

If students who are self-selecting to study abroad are already experiencing higher levels of spiritual maturity, study abroad programs have a unique opportunity to engage these students on a deeper spiritual level. According to this study, encouraging elements of independence and experiences that elevate self-discovery would be a beneficial place to promote spiritual growth. With students entering at higher levels, study abroad leaders need to understand the realities of less drastic growth for students already displaying significant levels of maturity. Freshmen students on campus may need more support. At a lower level of spiritual maturity, these students may need leaders with heightened compassion and understanding for where the student currently is in his or her relationship with God. Also, students at lower levels of spiritual maturity may need significantly more help to process through difficult times in their lives or assistance in meaningful reflection following spiritually significant events or relationships.

In working with study abroad freshmen or those with higher levels of spiritual maturity, study abroad practitioners have the opportunity to challenge students beyond their current understandings of faith. Several avenues may be helpful in this process, such



as increasing students' leadership responsibilities, especially in leadership positions serving fellow students. Also, practitioners should learn to discern their students' strengths and gifts in order to intentionally put students in situations where their gifts are being utilized. Programs should be developed that focus on aspects of self-discovery to encourage continued growth in students.

Any new challenges put in place for more spiritually mature students still requires diligence from the study abroad practitioner to adequately support the students. New levels of challenge that produce growth in spiritual maturity must be coupled with practitioners who are intentionally serving the individual students within their care.

### *Summary*

This study was conducted to determine if there existed a relationship between social climate and spiritual development in college students. The research compared freshmen students involved in an international learning community to a group of freshmen students studying on-campus. Differences in social climate were tested using Moos' Group Environment Scale. Change in spiritual maturity was tested in each group by Ellison's Spiritual Maturity Index. Analyses were run in order to determine the relationship between students' perception of social climate and change in spiritual maturity.

The statistical model was not strong enough to confidently determine if students' perceptions of certain subscales measured by the GES impacted change in spiritual maturity over the semester. However, it was found that the subscale levels of independence and self-discovery were significantly higher in the study abroad group than in the on-campus group. It was suggested by this study that these results may be due to

the ISP students experiencing a completely new cultural setting. Also, on-campus students' expectations for social climate may have impacted the social climate subscales.

The ISP students did not have higher change in spiritual maturity than on-campus students as predicted. However, it was found that ISP students were significantly more spiritually mature than on-campus students at the beginning of their freshmen semester. While this lack of change may have been due to a ceiling effect on the SMI, it nonetheless raises significant implications for student affairs professionals working in a study abroad program. Specific programming and mentoring relationships may need to be directed toward students at a higher spiritual maturity level. Student affairs professionals might need to design programs with the understanding that change in spiritual maturity may take longer with more spiritually mature students.

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## Appendix A

## The Effects of Social Climate on the Personal Growth of College Students

The purpose of this research project is to discover the personal development that occurs in college students over one semester in different learning environments. This project includes answering a survey regarding your spiritual maturity through a pre and posttest. You will also be asked to complete a survey regarding the social environment of your living community. Each survey will take no more than 15 minutes to complete.

There are minimal foreseeable risks with participation in this study. Benefits may include recognizing signs of spiritual maturity in yourself.

Your results will be kept completely confidential. Identification numbers will be assigned to each participant in order to compare the pretest to the posttest, as well as the social environment scale. These identification numbers are seen only by the researcher and will be destroyed once the research is complete.

Your continued participation in this study is encouraged, but is strictly voluntary. You have the choice to stop out of this study at any time.

Questions or concerns are always welcome. Please contact the persons at the bottom of this sheet.

I agree to participate in this study entitled, "The Effects of Social Climate on the Spiritual Growth of College Students". I understand what the study entails and that my participation in this study is completely voluntary.

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Participant's Signature

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Date

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## Appendix B

### The Effects of Social Climate on the Personal Growth of College Students

The purpose of this research project is to discover the personal development that occurs in college students over one semester in different learning environments. This project includes answering a survey regarding your spiritual maturity through a pre and posttest. You will also be asked to complete a survey regarding the social environment of your living community. Each survey will take no more than 15 minutes to complete.

There are minimal foreseeable risks with participation in this study. Benefits may include recognizing signs of spiritual maturity in yourself.

Your results will be kept completely confidential. Identification numbers will be assigned to each participant in order to compare the pretest to the posttest, as well as the social environment scale. These identification numbers are seen only by the researcher and will be destroyed once the research is complete.

Pizza and pop will be provided for the meeting to complete the posttest and the social environment scale.

Your continued participation in this study is encouraged, but is strictly voluntary. You have the choice to stop out of this study at any time.

Questions or concerns are always welcome. Please contact the persons at the bottom of this sheet.

I agree to participate in this study entitled, “The Effects of Social Climate on the Spiritual Growth of College Students”. I understand what the study entails and that my participation in this study is completely voluntary.

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