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The Study of Kinesiology and Ignatian Spirituality: Parallels through Exercise

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Abstract

Spirituality relates to an internal movement towards the sacred, while kinesiology is the science of physical human movement. Strong, user-friendly communication between spiritual directors and retreatants is important to the development of an individualized productive retreat experience. To better facilitate guidance, it is helpful for directors to understand the parallels between spiritual exercises and the expertise of retreatants and for retreatants to understand comparisons between their professional and spiritual lives. The physical activity of St. Ignatius during his pilgrimage across Spain exemplifies the similarities between Ignatian spirituality and the science of human movement. Comparisons between Ignatian spirituality and kinesiology include the need for practice of specific exercises, the underlying structure of the Ignatian spiritual exercises compared to a periodized physical exercise program, and the discernment or analysis of movements involved in both fields. Knowledge of the overlap between kinesiology and spirituality may result in retreatants familiar with the science of human movement and exercise developing a better understanding of their spiritual selves and ultimately a closer relationship to God.

Introduction

Science and spirituality are often depicted as being mutually exclusive and often in conflict with one another. In reality, there may be more similarities than differences between particular fields within each discipline. Specifically, there are many parallels between the fields of kinesiology and spirituality. Some of these include the analysis of movements in both fields and, likewise, the need for practice and participation in exercises in both. The similarities become particularly evident when comparing kinesiology and exercise to Ignatian spirituality as the discernment of movement and a prescribed course of prayer are the central tenet of the Spiritual Exercises of St. Ignatius.

The purpose of this article is to describe the parallels between the Ignatian Exercises and the field of kinesiology. A bridge of terminology and theories between the two practices will help guide spiritual directors who work with professionals trained in kinesiology and, likewise, help those trained in kinesiology who participate in the spiritual exercises through retreats, spiritual directions, or one of the many adaptations develop a closer relationship to their true selves and to God.

Terms Defined

Kinesiology involves the study of functional mechanics and anatomy as it relates to human movement. Fields of study within kinesiology may include, but are not exclusive to, exercise physiology, biomechanics, many allied health care professions, and physical education. Each of these professions take the principles and theories involved with kinesiology and applies them to a specialized population. Yet, the science of human physical movement is at the core of each field.

Spirituality, while lacking an absolute definition, is an umbrella term that involves an experience with the sacred and includes many fields and branches beneath it. Like kinesiology, spirituality involves movement but here relates to an inner movement. This movement often pertains to the experiences in finding one's purpose or meaning in life. In particular, Ignatian spirituality focuses on finding God in everyday life. If physicality is an integral component of earthly existence, there may be no better example of God's presence in everyday life than the design of the human body and the movement that results. Physical being combines a complex system of physiology and anatomy working within the confines of physics to enable a series of integrated movements.

In order to become proficient at any movement, practice is required. Practice involves the use of exercises to improve or maintain this proficiency. The practice of kinesiology includes the development of physical exercise programs for people with and without disabilities, maintenance of independence during aging, the prevention of disease due to trauma and self-neglect, and physical rehabilitation through the use of therapeutic exercise following injury or disease. Definitions for “exercise” include that it is a single movement or series of movements completed to become stronger and healthier or movement performed to develop a specific skill. ¹ “To exercise” is also defined as the routine and regular use of a skill or bodily organ. Exercise, however, does not have to be limited to physical movement. It can involve mental and spiritual movements. The concept of exercise extending past the physical is exemplified by the Spiritual Exercises of St. Ignatius of Loyola and by the stories and portrayal of St. Ignatius himself.

St. Ignatius and Kinesiology

St. Ignatius, the man behind the Spiritual Exercises, is often depicted with one foot off the ground or with a flowing cape trailing behind him. These depictions seem to indicate physical movement and more specifically the idea that St. Ignatius is in the process of walking. Where does this idea originate? St. Ignatius referred to himself as “the pilgrim”² and is often referred to as a “man on the move.” St. Ignatius was a constant traveler, and his preferred mode of transportation was his own feet. In fact, St. Ignatius' famous pilgrimage in 1522 covered the approximate 400 miles across Spain from Azpeitia to Manresa on foot.

Kinesiology routinely involves the examination of physical activity, the mechanisms that give us the ability to move, and the outcomes resulting from this movement. The field of kinesiology can be utilized to provide an objective analysis of the pilgrimage of St. Ignatius. Over approximately forty-nine days, St. Ignatius walked from his birthplace in Azpeitia to the Shrine of Our Lady at Montserrat ending at the town of Manresa. This journey covered approximately 646.6 km (401.8 miles) and is divided into twenty-seven walkable sections for current pilgrims.³ This means that if a pilgrim were to cover an average of 23.9 km per

day of the pilgrimage walking at an average speed of 3.2-4.8 km per hour, he or she would walk for 5-7.5 hours each day. The approximate energy expenditure value for cross-country hiking is estimated to be 6.0 metabolic equivalent intensity levels (MET) per minute.⁴ A 71 kg (156 lb.) person hiking for an average of six hours and fifteen minutes would expend 2,250 MET and approximately 2,662 calories on a single day of the pilgrimage. This more than triples the current United States Department for Health and Human Services recommendation for daily physical activity.⁵ It is recognized that a physically active lifestyle is directly related to many significant health benefits.⁶ Evidence strongly supports that many diseases are inversely related to regular physical activity, including obesity; type 2 diabetes mellitus; coronary heart disease; stroke; cancers, including of the colon and breast; depression; and anxiety. Concurrently, regular physical activity improves cardiorespiratory and muscular fitness and cognitive function.

There is also a multitude of evidence linking spirituality to improvements in overall health. Individuals who are both spiritually and physically active report a greater quality of life.⁷ Spirituality has demonstrated a cardio-protective effect through improvements in blood pressure, decreases in fasting glucose levels, and improvements in triglyceride measures.⁸ In healthy persons, regular religious service attendance is linked to a 25% reduction in overall risk of mortality after controlling for potential confounders.⁹ With his pilgrimage, St. Ignatius provides an excellent example of how to integrate physical and spiritual health.

Prior to his pilgrimage, the former Inigo Lopez de Loyola lay bedridden recovering from injuries suffered during his time as a soldier. During the Battle of Pamplona in 1521, he was struck by a cannonball that severely injured both legs, including significant fractures to one.¹⁰ Inigo underwent several painful and poorly-performed surgeries to fix the broken bones, including a second surgery to reset the improperly healed fracture. These multiple procedures ultimately left him with physical deformities and an abnormal gait. It is likely that during his post-surgical recovery and spiritual awakening St. Ignatius was cared for by several doctors trained in the art of

physical rehabilitation and the early science of kinesiology. These professionals might be considered the precursors to current day allied healthcare practitioners, including but not exclusive to physical therapists, athletic trainers, and chiropractors, who are often trained in our modern day departments of kinesiology. His ability to walk again was likely developed over a considerable amount of time and significant effort. If the doctors of St. Ignatius' time did not have extensive knowledge of kinesiology, including bodily mechanics and synergies, it is likely St. Ignatius may have never made his pivotal journey across Spain from which the Spiritual Exercises were born.

Spiritual Exercise and Kinesiology

The Spiritual Exercises of St. Ignatius were developed over the course of his pilgrimage and time in Manresa from a series of notes, prayers and meditations practiced and scribed by St. Ignatius himself. Today, practice of the exercises is intended to lead to improvements in spiritual health. Likewise, kinesiology involves the role of human motion and exercise in promoting physical and mental health and concurrently reducing disease risk.

The Spiritual Exercises are organized into four "weeks" of practice. Each week has a structure designed to elicit specific outcomes extending from purgation to illumination and finally to union with Jesus. Together, these weeks form a progressive scaffolding of prayer and contemplation designed to enhance self-actualization and an improved relationship with God. This parallels the development of a periodized physical exercise program. A linear periodized exercise training program is designed to progressively increase the volume and intensity of physical training with the ultimate goal of beneficial physical adaptation. Similar to the Spiritual Exercises, this methodology of exercise programming often takes place across three to four week training blocks, termed "microcycles."¹¹ Participation in periodized exercise cycles has been shown to improve aerobic and anaerobic capacity,¹² strength, power, and body composition.¹³

Both spiritual and physical exercise also require regular participation and practice for positive adaptation. It may be important to practice the Spiritual Exercises with greater frequency than exercises of a physical nature. St. Ignatius recommends a daily commitment to his exercises while current physical activity guidelines recommend activity over most days of the week.¹⁴ A planned "rest" day from physical exercise is typically included for adequate recovery and adaptation. In this way, the Spiritual Exercises may in fact be of greater intensity than their physical counterparts.

The similarities between St. Ignatius' exercises and physical exercise do not stop there. St. Ignatius suggests that his exercises be performed under the guidance of a spiritual director. The spiritual director provides for a personalized, flexible direction of the exercises and enhanced understanding of what the participant is experiencing in his or her communications with God. Similarly, a competent exercise professional educated in kinesiology can assist a patient or client in the development of an individualized, flexible comprehensive training or rehabilitation program. Similar to exercise training, Ignatian spiritual direction requires agreed upon presuppositions, specific aims for adaptation, and a methodology to meet those aims.¹⁵ Personal trainers, physical educators, strength and conditioning specialists, and coaches alike can fill the role of guide or director. As with a well-trained spiritual director, certified and credentialed exercise and coaching professionals provide appropriate mentoring and direction as well as safeguards against pitfalls during training, including injury, undertraining, and overtraining.

Discernment and Analysis of Movement

A constant theme throughout the spiritual exercises is developing the ability to discern the movements in individuals' spiritual lives. Essentially, this involves tracking their daily orientation and the direction that life is taking them. They should strive to recognize the shifts that occur between feelings of consolation and desolation. It is important to track these spiritual fluctuations so that life decisions can be made in the appropriate light. Consolation can be recognized as a positive influence occurring in life.

This includes a sense of calming and peace within a generation of inspiration and energy. Desolation, on the other hand, arises from negative energy and defeatist feelings, including depression, sadness, fear, and self-doubt. If a life decision, especially a large decision about relationships, work, or family, is made during a time of desolation, negative consequences may occur and lead the individual away from a connection with God rather than towards a more spiritually centered life. When individuals can recognize the drift in their orientation from consolation to desolation, they are better suited to defend against decisions that will have a negative impact.

In the study of kinesiology, individuals are likewise asked to discern movements. These observations now focus on the orientation of the static and dynamic physical body. They involve the analysis of the kinetics and kinematics related to their physical motions. Kinetics is a term for the description of a motion and the forces that cause that movement. This parallels spirituality in describing the influence God has as the cause of spiritual orientation and movements. Kinematics is a term for the description of the movement itself without regard to the forces that cause it. This is similar to a favorite prayer or passage or the reflection that follows prayer that describes their internal spiritual discernments.

During the spiritual exercises, it is usually recommended that the individual spends time journaling his or her experiences, thoughts, and interpretation of the prayer session. This could be viewed as a “kinematic” assessment of their spiritual movements. Compare this to how individuals in the fields related to kinesiology are trained to recognize and correct inappropriate postural and movement patterns. These may include improper sitting, standing, walking, running, and lifting weights. If individuals are aware of appropriate physical movement patterns during daily life and exercise, they can avoid positions and movements that may lead to physical injury. For example, when picking up a heavy box from the floor, it is imperative to squat down with the legs rather than bending at the waist to lift this weight. Lifting incorrectly is a major cause of injury to the back. By understanding, assessing, and correcting inappropriate movements an individual can lead a

healthier and injury-free lifestyle. Likewise, if individuals are trained in spiritual discernment, they can identify the positive or negative factors that are influencing their orientation toward or away from God.

Reflection following a prayer session allows individuals to identify appropriate follow-up steps they can take. If they are experiencing consolation, reflection on their experiences can help them prolong this state of consolation. Reflection can also help them recognize desolation and reminds them that they do not stay in desolation for long because they have knowledge of the return to a state of consolation. This is similar to kinesiology when faced with overcoming a physical injury. The injured individuals must first identify that they are hurt and then recognize that injury is likely to happen with physical activity but that eventually these physical wounds will likely heal with appropriate care. Even in those cases where a physical injury may not heal completely, as with paralysis, these individuals somehow find consolation with their physical states.

Application


It may be useful for a spiritual director working with a kinesiologist, health care practitioner, or exercise specialist to relate the spiritual exercises to the parallels with their profession in order to help the retreatant experience a deeper connection with God. Kinesiology professionals may better understand the gradual progressions and necessary practices of their spiritual journeys based on previous understanding of concepts related to physical exercise. It may likewise be useful for retreatants to utilize these connections to better explain their prayer experiences to their spiritual director, reflect on the connections in their journals, and better develop the ability to discern spiritual movements.

Points of application that may be important to note for spiritual directors and retreatants alike include:

- During physical and spiritual exercises, it is important to identify the movements that are occurring and constantly assess them for both positive and negative aspects.

- Physical and spiritual exercises take consistent practice and gradual progression for positive adaptations.
- A spiritual director, like an exercise specialist, can guide a retreatant, but cannot do “the work” for them.

Summary

The parallels between spirituality, specifically Ignatian spirituality, and the field of kinesiology run deep. From the physically active life of St. Ignatius to the discernment of movement, there are direct connections between the spiritual exercises and the professions of kinesiology that can be utilized by spiritual directors and retreatants alike. In physical exercise and prayer alike, individuals should focus on consistent practice under the helpful guidance of a trained professional to navigate both the physical and spiritual movements they experience in hope that they can ultimately develop a closer relationship to their true selves and to God. 

Notes

¹ Merriam-Webster.com, "Exercise," accessed May 17, 2014, <http://www.merriam-webster.com/dictionary/exercise>.

² Saint Ignatius Loyola, *The Autobiography of St. Ignatius*, ed. J.F.X. O'Connor, S.J. (New York, NY: Benzinger Brothers, 1900), 34.

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⁵ U.S. Department of Health and Human Services, *Physical Activity Guidelines for Americans* (Washington, DC: U.S. Department of Health and Human Services 2008), 22.

⁶ *Ibid.*, 9.

⁷ James F. Konopack and Edward McAuley, "Efficacy-Mediated Effects of Spirituality and Physical Activity on Quality of Life: A Path Analysis," *Health and Quality of Life Outcomes* 10 no. 57 (2012).

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⁹ Lynda H. Powell, Leila Shahabi, and Carl E. Thoresen, "Religion and Spirituality: Linkages to Physical Health," *The American Psychologist* 58 no. 1 (2003): 36-52.

¹⁰ Loyola, *Autobiography*, 25.

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¹² Mark Rakobowchuk, Sophie Tanguay, Kirsten A. Burgomaster, Krista R. Howarth, et al. "Sprint Interval and Traditional Endurance Training Induce Similar Improvements in Peripheral Arterial Stiffness and Flow-Mediated Dilatation in Healthy Humans," *American Journal of Physiology. Regulatory, Integrative and Comparative Physiology* 295 no. 1 (2008): R236-R242.

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¹⁴ U.S. Department of Health and Human Services, *Physical Activity Guidelines*, 22.

¹⁵ Brian O'Leary, S.J., "What Is Specific to an Ignatian Model of Spiritual Direction?" *The Way* 47 Jan/April (2008): 14.