

AN EXPLORATION OF FLOW AMONG  
COLLEGIATE MARCHING BAND  
PARTICIPANTS

By

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## CHAPTER I

### INTRODUCTION

The one kind of pleasure that human nature cannot do without is the pleasure produced by music (GIGA, 2005). Music has the ability to transcend time, cultures and generations. Through music the greatest events are commemorated and the strongest of emotions are evoked. Individuals turn to music for its ability to take on virtually any form and satisfy our inherent need to express that which is inexpressible through language (Custodero, 2002). It can be inspirational and motivating, angry and vengeful or blissful and entertaining.

Over the last decade, studies have uncovered a part of the brain that is only activated when reading musical scores (CMW, 2005). MRI studies have confirmed that multiple brain regions are activated during musical performances (Custodero, 2002). Several other studies have gone on to find that music is good for not only the mind but also the body and soul (AMC, 2005). It increases brain power, is a stress reliever, and has the ability to combat depression (AMC, 2005).

Musical experiences involve challenges and thought processes that are entirely different from those required for any other task (Elliott, 1995). No one knows the challenges and complexities presented in a piece of music better than the people who perform it. These musicians are also at a greater advantage to benefit from the positive effects from music than anyone else. When done well, music engages the whole self



(Elliott, 1995). It envelops a person's entire system of conscious powers: attention, awareness, cognition, emotion, intention and memory (Elliott, 1995). Music then, above all else, offers a unique way to bring order to consciousness and as a result achieve self growth and self knowledge (Elliott, 1995).

The idea of music eliciting a person's entire system of conscious powers is congruent to the main idea behind the concept of optimal experience. This kind of experience is most likely to occur when an individual's conscious powers are voluntarily stretched to their capacity in an effort to accomplish something arduous yet meaningful (Csikszentmihalyi, 1990). This state of optimal experience can only occur when an order to consciousness has been achieved. When societal expectations or biological needs interfere, this creates disorder. Order is restored once these needs have been met thus leaving an individual open to experience pleasure. This is the idea behind an order of consciousness, a state which musicians are more apt to reach. According to Elliott (1995), dynamic musical experiences provide the conditions necessary to potentially attain optimal experience.

Knowing that it would be beneficial to understand ways in which human beings profit from optimal states of involvement (Kraus, 2003), Mihaly Csikszentmihalyi began investigating total involvement in individuals engaged in a variety of activities. Through these studies a common theme emerged. Csikszentmihalyi found many of his respondents used the term "flow" when describing their experiences (Jackson & Csikszentmihalyi, 1999). This prompted Csikszentmihalyi to conceive the theory of flow – the state in which the skill of the individual is congruent to the challenge being presented and the individual is so involved in the activity that nothing else seems to matter (Jackson, 1999).

Flow is important for two main reasons. First, it makes the activity in which flow is being experienced more enjoyable (Csikszentmihalyi, 1990). Second, “it builds the self-confidence that allows us to develop skills and make significant contributions to humankind (Csikszentmihalyi, 1990, p. 42).”

While the potential to achieve flow exists in most any setting, athletes’ experiences in flow have been among the most frequently researched (Dion, 2003; Jackson & Csikszentmihalyi, 1999; Jackson, 1996; Jackson & Marsh, 1996; Jackson 1995; Peterson, 2004). Much of the research that has been carried out on athletes and flow postulate that elite athletes are more likely to achieve a state of flow than non elite athletes (Stein, Kimiecik, Daniels & Jackson, 1995). Other studies have centered on whether or not this elite status actually works against the athlete’s flow experiences. The strain of competition, the presence of talent scouts and the pressure to win are all elements present in elite competition that could deter an athlete from a flow experience.

In 2004, Ryan Peterson explored the flow experiences between Division I and intramural athletes. The purpose was to explore how the flow experiences of both groups related or differentiated. Both sets of athletes were asked to complete a series of measures about their flow experience. Comparisons were then made in relation to the characteristics of flow, the perceived facilitators of flow, the frequency of flow experiences, and explored the role of perceived ability. Peterson’s study found that mainly, the intramural athletes reported experiencing the characteristics of flow more frequently than the Division I athletes. These characteristics were the merging of action, awareness, autotelic experience, transformation of time and having clear goals.

According to Jackson and Csikszentmihalyi (1999), sport presents a “special opportunity” for flow to occur and there are few other activities that are as apt to make flow happen. Performing music is one of those exempted activities (Jackson & Csikszentmihalyi, 1999). Musical experiences share certain basic characteristics in common with the flow that arise in other domains, including sports (Elliott, 1995). Chapter two will provide further insights into the characteristics of flow and those basic characteristics shared by both flow and musical experiences.

The purpose of this paper is to explore to what extent musicians experience flow. While, as we have stated above, much research has been done in relation to athletes in flow, very little has been done using music as a basis. Research available generally uses adolescents as its population and one instance was found exploring flow in a collegiate wind ensemble rehearsal. To the knowledge of the author, no study has been conducted exploring flow in the collegiate marching band setting.

Authors such as Jackson and Csikszentmihalyi (1999), and Elliott (1995) believe musical experiences are just as apt to provide flow experiences as sport. Marching band itself is truly a blending of both music and physical activity making it a unique venue in which to explore the flow experience. This study will be conducted using Peterson’s (2004) exploration of Division I athletes and intramural athletes as its root.

A sample of the collegiate marching band population will be surveyed about their experiences of flow; in particular characteristics of flow, the perceived facilitators of flow and the frequency of flow experiences. Questions guiding this research are as follows:

- a. Do collegiate marching band participants experience flow?

- b. In what type of setting were flow experiences more likely to occur? (rehearsal vs. performance vs. type of performance)
- c. What are the factors that facilitate flow in a marching band setting?

As a result of the above questions as well as a review of the literature, the following hypotheses have been made:

1. There is no difference between those members of collegiate marching bands who have experienced flow versus those who have not.
2. Flow experiences are experienced more often in a performance setting than in a rehearsal setting.
3. Flow experiences are reported more often in association with shows in which the participant finds enjoyment versus those they do not.

#### *Assumptions*

It is assumed that all participants answered questions independently from one another. In addition, it is assumed that all participants will answer honestly.

#### *Delimitations*

Only collegiate marching band members attending this particular convention were considered for this study.

#### *Limitations of the study*

There are a few limitations that can be associated with this study. First, the sample for the study was a convenience sample. The researcher knew of the convention and knew that this location would provide the most diverse population of marching band members.

Placing the research packets within the convention registration packets also made it rather easy for the students to overlook the research packets and to not fill them out. In addition, since most students just take the necessary items out of the convention packets to use for the duration of the convention, the research packet was often left in the larger packet and subsequently not filled out.

Another limitation was the time that spanned between the last marching performance for most of the respondents and the beginning of the convention. Respondents were asked to think about their most recent marching season when addressing the question. On average, there would have been a seven month time span between the two occurrences. This limitation could be corrected by either collecting the data at the very end of the marching season, or after a specific performance that participants are to use as a basis for their responses.

The biggest limitation of this study was simply in its design. The original concept was to replicate the study done by Peterson (2004) in which NCAA Division I athletes were compared to intramural athletes. The first three chapters were based on that assumption and not on the actual data gathering tools that were in place.

### *Definitions*

**Autotelic Experience:** An experience in which the participant freely chooses to engage in and that is intrinsically satisfying (Jackson & Eklund, 2004).

**Flow:** A state of consciousness where one becomes totally absorbed in what one is doing to the exclusion of all other thoughts and emotions (Jackson & Eklund, 2004). Flow can also be described as being “in the zone.”

Order of Consciousness: Incoming information causes no anxiety or disruption but is matched with the goals of the self. Elliot simplifies this concept by explaining: “When biological or social needs intrude into consciousness, the result is disorder. Order is restored on consciousness by satisfying these needs. When consciousness tells us that our biological needs or social expectations are satisfied, we experience pleasure (p. 115).”

## CHAPTER II

### REVIEW OF LITERATURE

#### *Characteristics of Flow*

As Csikszentmihalyi and Jackson both furthered their research on the theory of flow, they found that despite differences among the activities individuals were participating in, they all described their state of mind in similar terms. Their explanations of their feelings were characterized by a common set of features that became identified as the flow dimensions (Jackson and Csikszentmihalyi, 1999). Understanding these features is a fundamental necessity in understanding flow in any context. The following dimensions must all be established for the optimal experience to be achieved.

#### *The Balance of Challenge and Skill*

Jackson and Csikszentmihalyi refer to this component as a “golden rule” of flow (Jackson and Csikszentmihalyi, 1999). It is the first requisite of flow and refers to the balance of the perceived challenge against the skills an individual believes they have. It is important that these two concepts align. If an individual’s skill exceeds that of the challenge, the individual will become bored and disengaged. If the skill exceeds that of the individual’s skill, then the individual will become frustrated or anxious. Enjoyment, then, lies at the boundary between boredom and anxiety where the challenge and skill are accurately balanced (Csikszentmihalyi, 1990). A visual representation of the challenge/skill balance is offered in Appendix A.

### *Merging of Action and Awareness*

Action and awareness merge only when an individual is completely absorbed in what they are doing. The challenge-skill balance has been met and all focus has been concentrated on the task at hand. It is at this point that the mind and body seem to fuse into one (Jackson and Csikszentmihalyi, 1999). The individual will feel as though they are at one with their actions and all outside interference will be tuned out except what stimuli is needed to continue that activity.

### *Clear goals and unambiguous feedback*

According to Csikszentmihalyi (1990), the reason it is possible to achieve complete involvement in a flow experience is because the goals are clear and the feedback is immediate (p. 54). Goals should be set before an activity commences so that as the activity progresses, the participant knows exactly what to do. Since they know exactly what is expected of them, there is no need to doubt their actions (Jackson, 1999). Unambiguous feedback will help the individual to stay in tune and in control of what they are doing (Jackson and Csikszentmihalyi 1999). This feedback comes from both an individual's movements as well as external environmental cues.

### *Concentration on the task at hand*

In order to experience flow, the individual must be able to exclude any distracting events or irrelevant thoughts happening around an activity. The result of flow is total enjoyment of the activity. Total enjoyment leaves no room for irrelevant information to intrude (Csikszentmihalyi, 1990). The focus is complete and purposeful and no extraneous thoughts should distract from the activity (Jackson & Csikszentmihalyi, 1999).



### *Sense of Control*

A sense of control in flow frees an individual from the fear of failure and conversely creates a feeling of empowerment (Jackson & Csikszentmihalyi, 1999). This dimension is also referred to as the paradox of control. According to Csikszentmihalyi, what people enjoy is not the sense of being in control, but the sense of exercising control in difficult situations (1990). Because the individual feels as though they have developed the appropriate level of skill to match the challenge, they feel as though they are in control without having to think about it. This results in the individual feeling power, confidence and calm (Jackson 1995).

### *Loss of Self Consciousness*

The loss of self consciousness in the flow setting is a dimension that can actually leave an individual with a stronger and more positive perception of themselves (Jackson & Csikszentmihalyi, 1999). Throughout everyday life, individuals encounter several instances in which they feel as though they are being threatened. The result is self-scrutiny as the individual attempts to find the root of this threat. In a flow experience, the activities have clear goals, stable rules and challenges well matched to skill, thereby leaving little room for the self to become threatened (Csikszentmihalyi, 1990). This enables the individual to become fully engrossed within the activity and lose any self doubt they may have.

### *Transformation of time*

Depending on the activity and the way the individual approaches that activity, time can be experienced differently. Individuals will either experience the passage of time as having either sped up or in contrast slowing down. This dimension can be

considered a by-product of another dimension already discussed, total concentration (Jackson and Csikszentmihalyi, 1999). When one becomes completely absorbed within an activity, time is one of those extraneous pieces of information that does not penetrate an individual's consciousness. For activities taking long amounts of time, the perception of a quick passage of time will keep the individual's concentration and focus for as long as is needed (Jackson and Csikszentmihalyi, 1999). A laggard sense of time can be contributed to concentration. When your mind is focused, you encounter things with more clarity, allowing an individual greater awareness of the activity.

### *Autotelic Experience*

Csikszentmihalyi (1990) defines the autotelic experience as an activity that is not done with the expectation of a future benefit but because the activity is intrinsically rewarding. It is the end result of all the other dimensions of flow. These activities may not necessarily start out as enjoyable. Most activities require an individual to put out an effort that they may be reluctant to do. However, once an individual starts to receive positive feedback, it starts to become intrinsically rewarding (Csikszentmihalyi, 1990).

## *Review of Flow Literature*

### *Athletes and flow*

Activities that require intense physical or mental involvement are those that are most conducive to a flow experience. It is because of this that athletes and sport are often the focus of research on flow. Before exploring this phenomenon within musicians, as is the basis of this study, it is imperative that the occurrence of flow in a variety of sports and sport settings be reviewed.

Csikszentmihalyi's conceptualization of flow stemmed from research done in 1975. His early investigation of optimal experience in rock climbers, dancers and basketball players suggested that enjoyment and intrinsic satisfaction were the most important qualities of their experiences (Csikszentmihalyi, 1975). Those reporting intense levels of concentration and matching skill and challenge were said to be in flow.

Jackson went on to provide substantial contributions to this psychological theory with her exploration of flow in elite figure skaters (1992), elite athletes (1995, 1996) and with Csikszentmihalyi in an explanation of flow in sports (1999). Jackson's work with elite athletes found, much like Csikszentmihalyi's early work, that the autotelic experience was cited more often than the other dimensions of flow (Jackson, 1995). The athletes in this setting were involved in such sports as track and field, rowing, swimming, cycling, rugby, field hockey and triathlon (Jackson 1995). Jackson also found the results of this study demonstrated consistency with the findings from her research in elite figure skaters (Jackson, 1995). Descriptions such as awareness, concentrated focus, a slowing of time and a feeling of control given by figure skaters were also found in the descriptions given by elite athletes (Jackson, 1995).

Knowing that flow had been described as a genderless concept, Dion conducted an in-depth investigation on the flow experiences of elite female athletes with the notion that women's sport experiences were unique (Dion, 2004). In her study, Dion examined the effectiveness of flow as a mediating or neutralizing experience to women's objectification of their bodies.

Tai Chi practitioners were studied for their experiences of flow (Kiehne, 2002). The participants of the study were those individuals who had practiced Tai Chi for at

least five years. Participants reported experiencing all dimensions of flow with the exception of clear goals and the loss of self consciousness (Kiehne, 2002).

Equestrian athletes involved in the sport of dressage were also examined the relationship between reported flow state, individual goal orientation, and changes in reported flow state (Adamson, 2004). The study found that the athletes in the experimental group showed significant change when their competitive outcome was better than their expectations. This indicates that the flow state may be influenced by unexpected positive feedback (Adamson, 2004).

Even the ability of an athlete to experience a flow state while participating in a group dependent activity and the individual's subsequent satisfaction has been explored (Walker, 2002). This study, over all others done on athletes and flow, has particular relevance to the research being conducted by this author. The study employed both recreational and competitive female collegiate rowers. Results of this study demonstrated that rowers did experience flow while participating in a group dependent activity. Further, experiencing flow had a significant positive effect on the recreational athlete's satisfaction with the group's performance. The contrary was experienced for the competitive athlete's satisfaction – a flow experience had a negative effect (Walker, 2002). This study has relevance to the exploration of flow in collegiate marching band members because marching band is solely a group dependent activity. Within the collegiate setting, very few marching bands can be considered “competition” based. Therefore, many of its participants choose to engage in the activity for recreational purposes.

### *Flow in Music*

While we have reviewed instances where flow has been investigated in a sport and athletic context, significantly less research has been done to explore the occurrence of flow in relation to the arts and more specifically in music. To this author's knowledge, there are no specific instances of research done exploring flow experiences of collegiate marching band members. What follows is a review of literature and constructs, though limited, related to flow within various musical settings. This will serve as a baseline understanding of music in relation to the theory of flow.

### *Overview of Flow and Music*

Elliott (1995) has provided a strong basis for the understanding of the flow theory in relation to both music and music performance. Finding no text that met his needs as a teacher of music education philosophy, Elliott committed to writing his own. After becoming discontent with traditional philosophies of music, Elliott turned to a variety of contemporary scholars and philosophies, including Csikszentmihalyi and his proposed theory of flow (Elliott, 1995). Throughout his book, Elliott marries the theory of flow to musical experiences, giving it great relevance to the purpose of this paper.

Musical experiences share certain basic characteristics in common with the flow experiences that arise in other domains, including sports, as we have already explored. Musical experiences, Elliott offers, are unique because music and performing involve challenges and thought processes that are entirely different from those required for any other endeavor (Elliott, 1995). In general, the following can be said about musical experiences,

- “A musical experience results from a matching relationship between a specific kind of musicianship and a specific kind of musical challenge.
- The fundamental values of musical experiences are self-growth, self-knowledge, and enjoyment.
- During the musical experiences, performers and listeners often experience focused concentration and deep absorption.
- In the process of performing and/or listening, no other motivation is needed to sustain attention and effort apart from the experiences of enjoyment and integration that arise from one’s goal-directed musical actions (overt and covert) (Elliott, 1995, 126).”

Notice in his first point, Elliott theorized that a musical experience is a result of the matching of musicianship (one’s musical ability) and a music challenge. This is congruent to Csikszentmihalyi ideal that in order to achieve flow, the skill must meet the challenge. Elliott further illustrates this point by recreating the visual representation of flow using musical challenge and musicianship as the variables (see Appendix B ).

Elliott also places great emphasis on the role that consciousness and the realization of the self plays in a flow experience. Consciousness is the mediator between the drive to meet our biological needs and expectations of meeting cultural norms (Elliott, 1995). To be conscious means that conscious events are taking place and the individual has the capacity to guide, shape and deploy that which is taking place around them (Elliott, 1995). “As each person develops and realizes his or her powers of attending, thinking, feeling, intending, and remembering, the individual consciousness grows to the point of developing an independent status called the self (Elliott, 1995, p. 112).”

The process of the self is one that is circular. Attention to information, whether internal or external, determines conscious content; conscious content shapes intentions and goals; and intentions and goals determine how attention will be focused (Elliott, 1995). This dynamic process results in an order to consciousness and the self.

Fundamentally, humans engage in actions that strengthen the self because they find them more satisfying and enjoyable. These activities prove to be more demanding as they match and thus extend our powers of consciousness (Elliott, 1995). In music, increasingly intricate works require that the level of musicianship steadily progresses so as to meet the new demands. As a result, all aspects of consciousness are likewise heightened (Elliott, 1995).

Elliott proposes that a balance between a person's musicianship and the cognitive challenges that are inherent in performing a piece of music will result in the individual being able to achieve the fundamental values of self growth, self knowledge, musical enjoyment and self esteem (Elliott, 1995). In his view, "musicianship is not only an exquisite form of knowledge, it is a unique source of one of the most important kinds of knowledge humans can achieve: self knowledge (Elliott, 1995, p. 297)."

#### *Music, flow and the classroom*

Byrne, MacDonald and Carlton have made contributions to the understanding of effective teaching methodologies in music education (Byrne, C., Sheridan, M., 1998). In 2003, the colleagues investigated any links between flow and the create output of university student's musical compositions. Their interest lied in whether or not optimal experience would occur if three conditions of flow (clear goals, immediate feedback and challenge/skill balance) were present while completing the composition task. If flow

experiences were reported, would the quality of the composition be effected (Byrne, C., Sheridan, M., Carlton, L. 2003)? A significant correlation was found between flow levels of students and quality of their compositions. Implications of this study in the classroom as that if tasks are designed to be both stimulating and engaging for students, there will be a strong likelihood that the quality of the produced work will be high (Byrne, C., Sheridan, M., Carlton, L. 2003). As a result of the caliber of the work, students will feel higher levels of satisfaction and will be eager to discuss the process and learning experience (Byrne, C., Sheridan, M., & Carlton, L. 2003). “The attainment of high levels of flow would be a strong indicator of progress by the learner and of good-quality attainment in creative music-making (Byrne, C., Sheridan, M., & Carlton, L. 2003, p. 287).”

#### *Music, flow and perspective*

MacDonald (2003) believes that when individuals become so absorbed in the goals of performing well, they soon become known as performers, rather than people that perform. “These people become so obsessed by what they are doing that they fail to see where the performance fits into their lives as a whole. They fail to put the performance into perspective (MacDonald, 2003, p. 1).

Perspective becomes an important construct in relation to flow because perspective is pivotal to the first dimension of flow – the balance of challenge and skill. Perspective, as defined by MacDonald (2003) in relation to the field of high performance, involves the importance the individual places on the performance, as well as the ability to be aware of everything important within and surrounding the performance.



Orlick (2000) believes that it is not the event itself that elicits anxiety in a performer. Instead, it is the way the individual perceives the event that triggers an emotional response (Orlick 2000). Jackson and Csikszentmihalyi (1999) echoed this belief in their description of the balance between challenge and skill necessary to achieve flow. Your experience of an event will be determined more by what it is you believe you can do rather than your actual abilities (Jackson & Csikszentmihalyi, 1999).

MacDonald (2003) used perspective as his basis in exploring the meaning and value adolescent athletes and musicians attached to their performances. A positive perspective kept the athletes and musicians in a frame of mind that freed them from doubt and hesitation, allowing them to successfully overcome challenges (MacDonald 2003). This positive perspective, as well as an extreme passion for their activity is what kept these adolescents meaningfully engaged in their performance.

### *Musicians and Flow Experiences*

As longtime musicians, Bloom and Skutnick-Henley had a particular interest in finding why some musicians regularly experience flow while others do not. They were also interesting in identifying some important elements that may promote flow states among instrumental musicians (Bloom & Skutnick-Henley, 2005). Using demographic and individual differences, Bloom and Skutnick-Henley (2005) explored factors that predict flow in adult musicians.

They found it quite easy to apply the dimensions of flow with instrumental musicians. Playing music is often done by one's free will while musicians enjoy learning challenging new music and expanding the settings in which they perform (Bloom and Skutnick-Henley, 2005). Immediate feedback is also an integral part of instrumental

performance as musicians constantly use this feedback to sharpen their skills on particular passages and pieces.

In their study, Bloom and Skutnick-Henley (2005) surveyed 90 classical instrumental musicians about their experience of flow while playing an instrument. Five key predictors of flow proneness were identified as (1) self-confidence and self-trust while playing, (2) desire to experience and express feelings through music, (3) having experience goals, (4) ability to maintain focus on the music and (5) the ability to play without self-criticism with the first two of these predictors proving to be the most remarkable (Bloom and Skutnick-Henley, 2005). The study found 45% of flow experiences occurred while playing in an ensemble while a love of music was the dominant reason most musicians felt led to their flow experience. In addition, the study supports Csikszentmihalyi's assertion that flow is promoted more by striking a balance between challenge and skill rather than skill-level. Novices and professional musicians have the opportunity of experiencing flow (Bloom and Skutnick-Henley, 2005).

Bloom and Skutnick-Henley suggest that gathering data from professional musicians as well as students may render a better picture of flow proneness among musicians. Overall, they believe that experiencing flow while playing music is a major component of the enjoyment behind playing an instrument. If flow truly enhances this experience, then identifying barriers to flow could be a critical factor for both musicians and music educators (Bloom and Skutnick-Henley, 2005).

As a music educator, Kraus (2003) believes that college wind bands should provide a meaningful experience that is conducive to self-growth. This setting combines significant challenges in a goal-directed environment with its need for intense mental

involvement is conducive to flow experiences (Kraus 2003). Finding that very little research had been done exploring flow in a musical setting, Kraus (2003) studied collegiate level wind ensemble members and their experiences of flow. While Bloom and Skutnick-Henley (2005) found that 45% of their respondents experienced flow within an ensemble setting, a purpose of Kraus's study was to discern if flow could be achieved in group settings like collegiate wind bands.

Through his review of the literature concerning student's experiences in instrumental ensembles, Kraus determined that students (primarily high school students) preferred a rehearsal setting that was intrinsically motivating and where a time on task approach increased their level of attention and involvement (Kraus, 2003). The desire for an aesthetic experience, which Kraus believed may resemble flow, was also a common theme within the literature reviewed.

The findings of Kraus's study are relevant to the current investigation as the same facilitators, distractions and experiences of flow can occur within the group dynamic of a wind ensemble as well as within a marching band.

Within Kraus's study several patterns emerged. Overall there was a level of comfort experienced by the students. This comfort was due to either a confidence in their abilities, confidence that they would eventually learn challenging parts or being comfortable within the rehearsal environment itself (Kraus, 2003). Autotelic tendencies were indicated by students who felt involved during times in which they were not playing. However, this same situation was a form of boredom for others and thus a distraction to the flow experience. Another distraction experienced by the students was a

lack of direct involvement within the rehearsal. This was experienced when the conductor constantly addressed or rehearsed other players (Kraus, 2003).

Overall, Kraus found that students tended to exhibit flow characteristics in later rehearsals. An increased familiarity with the music as well as increase in skills as a result of previous rehearsals contributes to higher levels of involvement and participation (Kraus, 2003). The balance of challenge and skill emerged as the most prevalent dimension of flow and the one most likely to determine a flow experience (Kraus, 2003). Kraus (2003) believes that within the wind ensemble setting, students can choose the level of cognitive, musical and emotional involvement which will thus directly relate to their ability to experience flow. This same choice will also be a factor within this investigation.

### *Summary*

Performing engages a person's entire system of conscious powers and through the actions of music, one is likely to experience a positive or satisfying affect. (Elliott, 1995). Through the review of literature, we have found that musical experiences have provided the appropriate settings and characteristics such as those listed above that make it necessary for experiencing flow.

Realizing that there may be individual and/or activity specific differences in the way flow is experienced, Jackson states that there is a need to expand the study of flow states to more diverse populations in order to be able to accurately apply flow concepts to overall categories (Jackson, 1995).

With this in mind, the remainder of this paper will focus on the flow experiences of collegiate marching band members.

## CHAPTER III

### METHODOLOGY

#### *Restatement of Topic*

The purpose of this paper is to explore to what extent musicians experience flow. While much research has been done in relation to athletes in flow, very little has been done using music as a basis. Research available generally uses adolescents as it's populace and one instance was found exploring flow in a collegiate wind ensemble rehearsal. To the knowledge of the author, no study has been conducted exploring flow in the collegiate marching band setting.

#### *Hypotheses*

- (a) There is no difference between those members of collegiate marching bands who have experienced flow versus those who have not.
- (b) Flow experiences are experienced more often in a performance setting than in a rehearsal setting.
- (c) Flow experiences are reported more often in association with shows in which the participant finds enjoyment versus those they do not.

#### *Participants*

Participants of this study were active members of Kappa Kappa Psi Fraternity and Tau Beta Sigma Sorority. The purpose of these two organizations is to provide service to college and university bands and each member is required to participate in a band in

some capacity. The 6400 members of Kappa Kappa Psi and Tau Beta Sigma can be found within its 310 chapters at colleges and universities nationwide.

The national chapters of Kappa Kappa Psi and Tau Beta Sigma hold a national convention every biennium on odd numbered years. This convention setting was chosen to carry out research for this study because of the ability to obtain the greatest amount of diversity within the sample as possible, making this sample a convenience sample. The convention took place in Lexington, Kentucky from July 26, 2005 to July 31, 2005. The participation goal for the study was 200.

### *Procedures*

University Institutional Review Board (IRB) approval was obtained from Oklahoma State University prior to collecting data. The IRB approval letter can be found in Appendix C.

The National Executive Director, as well as the National Councils of Kappa Kappa Psi and Tau Beta Sigma were contacted to gain approval to conduct research at the national convention.

Once approval was obtained, a flow survey packet was assembled and placed in the convention registration materials for each collegiate aged registered participant. The flow survey packets were also available to those registering on site. When the students had completed the packets, they were asked to return them to a designated area with the headquarters office. The flow survey packet contained the following materials:

1. An introductory page which included information as to the purpose of this study, directions on completing the enclosed materials, where it was to be returned as well as a definition of flow.

2. Rights of the participant and an informed consent form
3. Demographic and background questionnaire
4. Flow measurement instruments
  - Flow State Scale-2 (FSS2)
  - Flow frequency
  - Flow Facilitator

The materials contained in the flow survey packet can be found in Appendices D through H of this study.

#### *Flow State Scale-2 (FSS-2)*

The Flow State Scale-2 developed by Jackson and Eklund (2004 ) consists of 36 items. The scale includes nine subscales to represent the nine characteristics of flow. Participants were asked to answer each question using a 5 point Likert Scale ranging from strongly disagree (1) to strongly agree (5).

Item identification sample reliability estimates for the FSS-2 ranged from .80 to .90, with a mean alpha of .85. Strong internal consistency has been demonstrated in a cross-validation sample with an overall mean alpha of 0.87 and alpha value on subscales ranging from 0.80 to 0.92 (Jackson & Eklund, 2004). The reliability coefficients for the FSS-2 subscales as well as the mean and standard deviations for the flow dimensions can be found in Table I.

Data collected from this measure was analyzed as directed by Jackson and Eklund in The Flow Scales Manual (2004). There are four items on the FSS-2 for each of the nine dimensions of flow. Items scores for each grouping of four questions were totaled to

obtain an overall score for that flow dimension. A total scale score was then calculated by adding the scores across all the dimensions.

Table I  
*Descriptive Statistics for the FSS-2*

Dimension	Reliability Coefficient	Mean	Standard Deviation
Challenge-Skill Balance	0.83	3.74	0.60
Merging of Action and Awareness	0.90	3.60	0.67
Clear Goals	0.87	4.00	0.67
Unambiguous Feedback	0.88	3.84	0.67
Concentration on the task at hand	0.88	3.68	0.65
Sense of control	0.88	3.73	0.64
Loss of self-consciousness	0.92	3.28	0.87
Transformation of Time	0.80	3.50	0.77
Autotelic Experience	0.91	4.16	0.63

For purposes of this study, additional variables were created using the responses to FSS-2 as a means for further analysis. The results of these variables are referred to as the dimensions rating.

If the respondent's mean score for a given dimension of flow equaled or exceeded the aggregate mean for the FSS-2 as reported by Jackson and Eklund (2004) (see Table D), then the respondent was assumed to have experienced that dimension of flow. From there, a dimension rating was created for each respondent consisting of the number of dimensions experienced out of nine. For example, if it was found that a respondent had experienced the dimensions clear goals, loss of self-consciousness and time transformation only then their dimension rating would be three out of nine.

#### *Flow Frequency*

This variable was assessed using two items. First, the musicians were asked how often in the last marching band season they experienced flow. They ranked their responses using a five point Likert Scale ranging from always to never. The musicians



were then asked how many times they felt they were in flow during the marching season. This question was open ended and participants were able to respond as they felt appropriate. Responses were then coded into one of four categories: most, some, hardly ever or unknown (unable to be categorized).

In a pilot study conducted with flow frequency, the two items measured by the scale demonstrated an adequate two week test-retest reliability ranging from 0.92 to 0.99.

### *Flow Facilitators*

The flow facilitator is a descriptive measure that consists of 35 questions. On a five point Likert Scale ranging from does not help (1) to helps a great deal (5), participants were asked to rate the extent to which each factor aids in obtaining flow.

This measure was developed for Peterson's (2004) study based on previous in depth interviews with athletes about factors that helped them achieve flow (Peterson, 2004).

In the pilot study of the flow facilitator measure, a two week test-retest reliability analysis showed adequate reliability ranging from 0.60 to 0.92 with an average of 0.82. Item number 16 (being physically rested) did not demonstrate adequate test-retest reliability (0.52) in the pilot study.

Results from the flow facilitator measure were used for descriptive purposes.

### *Statistical Software*

SPSS Version 12.0 was used to analyze all statistical data.

## CHAPTER IV

### FINDINGS

#### *Demographics*

. The sample for this study was a convenience sample taken from members attending the 2005 Kappa Kappa Psi and Tau Beta Sigma National Convention in Lexington, KY. The total number of attendees was 575. All active members of the fraternity and sorority attending the convention received a research packet within their convention registration packet. The research packet contained the consent to participate, a demographics questionnaire, the flow facilitator measure, the flow frequency measure and the Flow State Scale-2 (FSS-2) measure.

There were 123 colleges and universities represented at the convention. A complete list of the colleges and universities represented at the convention can be found in Appendix I.

The breakdown of these schools by region of the country is as follows: 15 from the Midwest; 24 from North Central; 28 from Northeast; 20 from Southeast; 24 from Southwest; and 12 from Western. A listing of the states that comprise each region can be found in Appendix J.

Every member registered for the convention received a survey packet in their convention registration packet. Participants were able to choose whether or not they would participate in the study by filling out and returning the survey packet. The number

of convention attendees participating in the survey was 155 (N=155). Of the 155 respondents, 14 were from the Midwest, 36 were from the North Central, 30 were from the Northeast, 31 were from the Southeast, 36 were from the Southwest and 8 were from Western.

The size of the colleges and universities attended by the respondents greatly varied. The mean population was 20,130 students. Table II provides a breakdown of the sizes of the colleges and universities as measured by the number of students in attendance.

Table II  
*Population of College or University by Percent*

Total Population	Percentage
Less than 10,000	22.6
10,001 to 20,000	27.7
20,001 to 30,000	22.6
30,001 to 40,000	14.8
40,001 to 50,000	3.2

The sizes of the marching bands to which respondents belonged also varied. The smallest band was reported as having 60 members with the largest having 433. The mean size of the marching bands was 224.71 members.

Over half of the respondents (N=96) were female while 59 were male. The mean age of the respondents was 21.0 years old with the youngest respondent being 18 years old and the oldest respondent 32 years old. The respondents were asked to circle the year in school that had just been completed. Freshman accounted for 18 respondents, 33 sophomores, 44 juniors, 46 seniors and 14 graduate students.

Table III

*Number of Subjects by Year and Major*

Year	Major									Total
	Music	Arts and Sciences	Health Sciences	Education	Engineering	Business	Human Envir. Sciences	Undecided	Other	
Freshman	6	8	0	0	0	3	0	1	0	18
Sophomore	5	13	3	4	2	2	2	0	2	33
Junior	13	17	4	2	5	2	0	1	0	44
Senior	12	13	4	9	4	3	1	0	0	46
Graduate	6	5	1	1	0	1	0	0	0	14
Total	42	56	12	16	11	11	3	2	2	155

The majors reported by the respondents were coded according to colleges within the university. Oklahoma State University was used as a guideline for creating these categories. Examples of types of majors contained within each college can be found in Appendix K.

Table III shows that all years in college were represented as well as a good sampling across the various colleges within the institutions.

Woodwind instruments were the primary instrument for 54.8% of the respondents, 40% played brass, 2.6% were in color guard and 2.6% played percussion. The mean for the number of years involved in music was 12.37 years ( $SD=2.97$ ) with the range being four years to 22 years. The mean for the number of years involved in marching band was 6.94 years ( $SD=2.17$ ) with the range being two years to 17 years.

Respondents were also active within other ensembles both within and outside of the institution. Musicians participated more frequently in ensembles within the college and university than outside. Table IV shows the number of respondents who participate in ensembles both inside and outside of the college or university.

#### *Flow Measurement Instruments*

Three measurements were used to assess the flow experiences of collegiate marching band members. These are the Flow Facilitator measure, the Flow State Scale-2 (FSS-2) and the Flow Frequency measure. An additional variable, the flow dimensions rating was created as a means for further analysis. This variable is reported with the findings for the FSS-2.

Table IV  
*Ensemble Participation both Within and Outside the Institution*

	Within the Institution	
	Participate	Do Not Participate
Wind Ensemble	24	131
Concert Band	93	62
Pep Band	82	73
Symphonic Band	21	134
Jazz Band	25	130
Other	20	125
	Outside of the Institution	
	Participate	Do Not Participate
Community Band	24	131
Church	14	141
Drum Corp	3	152
Other	12	143

Note: Respondent may be involved in more the one ensemble at any time

#### *Flow Facilitator Measure*

The purpose of the flow facilitator measure is to discover the extent to which certain factors aid in helping the respondent to achieve a flow experience.

The facilitators that respondents perceived as helping the most in this study were having fun performing, being mentally prepared and having a positive attitude.

*Having fun performing* was found to be the strongest facilitator with 85% (M=4.81) of the respondents perceiving it as being most important. *Being mentally prepared* was the next influential facilitator with 80% (M=4.77) believing it helped a great deal. *Having a positive attitude* followed with 77% (M=4.68) of the respondents feeling this to be a facilitator of flow.

*Being alone before a performance* was the facilitator perceived by the respondents as not helping at all (M=2.48). Of the 36 flow facilitators covered by the measure, this was the statement in which a majority of the respondents (78%) reported

the facilitator helped a fair amount to not helping at all. For further statistical reference, Appendix L contains the mean and standard deviation for all 36 items in the flow facilitator questionnaire.

Beyond the high and the low, two facilitators showed a significant difference in the response patterns. These facilitators were *not being concerned about others around me* and *having good pre-performance nutrition*. In Figure 1, blocking out negative thoughts shows the typical response pattern for this study. Responses to *not being concerned with others around me* demonstrate a deviation from the normal response pattern.

#### *Flow State Scale-2 (FSS-2)*

The FSS-2 is a measure designed to assess the dimensions within the flow experience within a particular activity. The nine dimensions of flow were the theoretical basis for the scale. While each dimension is a conceptual element, together they represent the optimal state of flow (Jackson & Eklund, 2004). The FSS-2 consists of 36 statements. Participants are asked to respond to the statement based on the extent to which they agree or disagree. Each dimension is represented by four questions. Flow dimension scores are obtained by totaling the four item scores (Jackson & Eklund, 2004).

Participants in this study were asked to respond to the FSS-2 in relation to their most recent marching season. Mean dimension scores from this study were consistently higher than the aggregate mean scores obtained by Jackson and Eklund (2004). This comparison is shown in Table V.

Figure 1

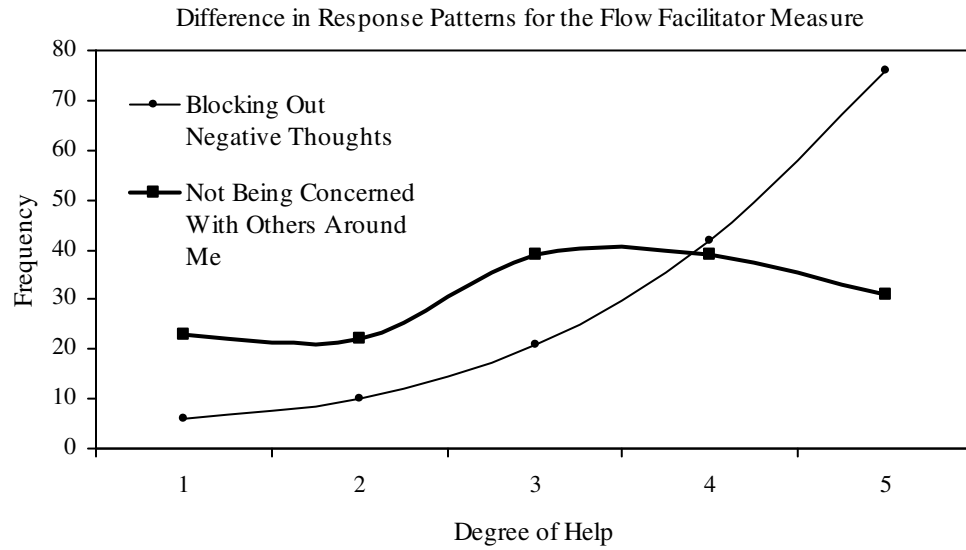


Figure XXX. Degree of help related to participants responses using a 5 points Likert scale. 1= does not help at all; 2= helps a small amount; 3= helps a fair amount; 4= helps a good amount and 5= helps a great deal

Table V

*Comparison of FSS-2 Dimensions*

Dimensions	Jackson and Eklund		Steckel	
	M	SD	M	SD
Challenge Skill Balance	3.74	0.60	4.08	0.62
Merging of Action and Awareness	3.60	0.67	3.87	0.75
Clear Goal	4.00	0.67	4.22	1.00
Unambiguous Feedback	3.84	0.67	4.12	0.56
Total Concentration	3.68	0.65	3.70	0.83
Sense of Control	3.73	0.64	3.92	0.68
Loss of Self Consciousness	3.28	0.87	3.21	1.03
Time Transformation	3.50	0.77	3.76	0.81
Autotelic Experience	4.16	0.63	4.43	0.68
Flow	3.73	0.45	3.92	0.48



Of the five statements (out of 36) with which participants strongly identified, four encompassed the dimension of an autotelic experience. This is also substantiated by the means and standard deviations for this dimension in both studies shown in Table V. The statements contained within this dimension were, “I loved the feeling of the performance and want to capture it again,” “I really enjoyed the experience,” “I found the experience extremely rewarding,” and “The experience left me feeling great.” Also ranking within the top five statements was, “I felt I was competent enough to meet the high demands of the situation,” which is related to the challenge-skill balance dimension.

Table VI shows the descriptive statistics for the highest and lowest ranking statements for the FSS-2 measure. A complete listing of statistical information for this measure can be found in Appendix M.

Table VI

*Highest and Lowest Reported Statements for the FSS-2*

Ranking	$\mu$	$\sigma$	Statement
1*	4.49	0.81	I loved the feeling of the performance and want to capture it again
2*	4.51	0.72	I really enjoyed the experience
3*	4.44	0.82	I found the experience extremely rewarding
4	4.40	0.65	I was competent enough to meet the high demands of the situation
5*	4.30	0.78	The experience left me feeling great
34	3.68	0.90	I had a feeling of total control
35	3.65	0.95	I had total concentration
36	2.72	1.24	I was not concerned with how I was presenting myself

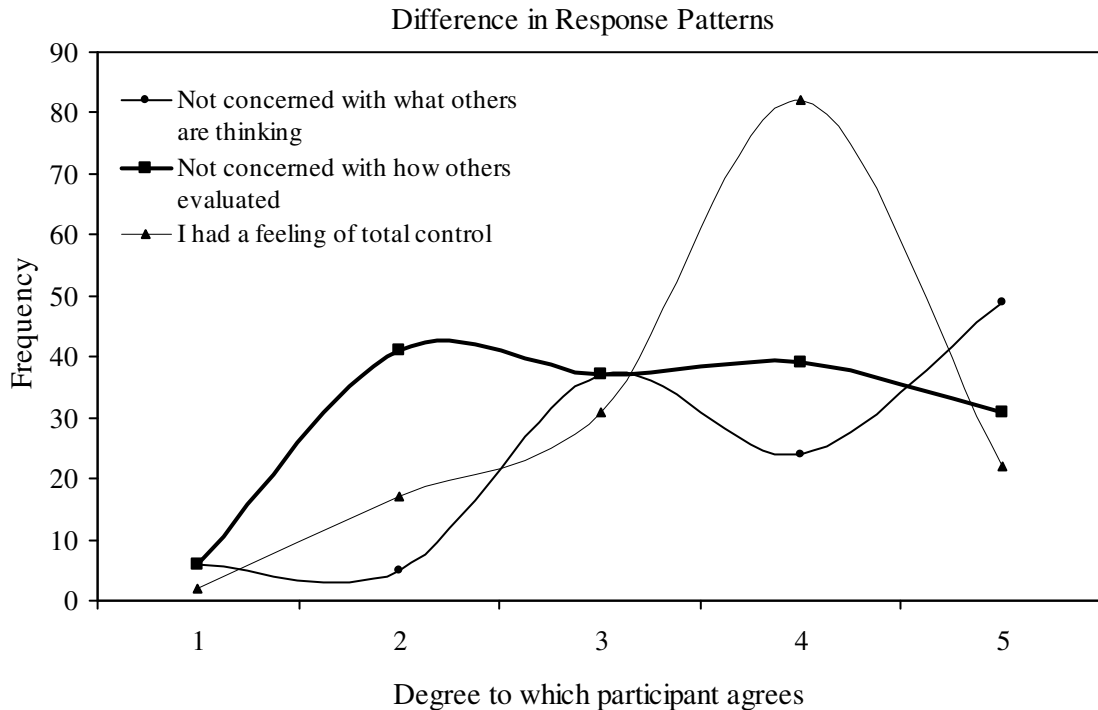
\* Contained in the autotelic dimension

Two additional statements showed trends worth mentioning. While a majority of the respondents generally agreed or strongly agreed with the statements, these two statements showed a greater distribution of responses. These statements were, “I was not

concerned with what others may have been thinking of me,” and “I was not concerned with how others may have been evaluating me,” and are both associated with the dimension of a loss of self- consciousness.

In figure 2, what was found to be a normal response pattern in this study for this measurement is represented by the statement, “I had a feeling of total control.” The other two statements show a departure from the typical response pattern.

Figure 2



*Flow Dimensions Rating*

The nine dimensions of flow *together* represent the optimal psychological state of flow (Jackson and Eklund, 2004). According to Csikszentmihalyi, “The combination of all these elements causes a sense of deep enjoyment that is so rewarding people feel that expending a great deal of energy is worthwhile simply to be able to feel it (1990, p. 49).”

The flow dimensions rating was created to give further insight as to how many dimensions participants experienced and if all dimensions were present, how many were believed to experience flow.

Of the 155 participants, only 14 were found to have experienced all nine dimensions. Three participants were found to not have experienced flow at all. A majority of the participants experienced a total of five to six dimensions of flow.

#### *Flow Frequency*

The flow dimensions rating substantiates the flow frequency measure as developed by Peterson (2004) and used in this study. Participants were first asked to answer the following question, “In your most recent marching season, how often did you experience flow?” Possible answers on the five point Likert scale ranged from always to never.

Responses to this question held consistent with the scores for the flow dimensions rating. In regards to flow frequency, 13 participants reported always experiencing flow while three reported never having the experience. The mean for this question was 2.60 with a standard deviation of 0.90.

Participants were also asked to respond to the following question, “In your most recent marching season, how often did you feel you were in flow during the season?” Responses to this question were coded into four possible categories: most, some, hardly ever and unknown. Responses categorized as unknown were determined to be inconclusive and did not fall into the requirements for any of the other categories.

Coding of the participants answers resulted in no one category showing an obvious and overwhelming trend. Answers from 32% of the participants were coded into

the category of most, 35.5% into the category of sometimes and 24.5% in hardly ever (M=1.77; SD=0.91). Responses determined to be inconclusive accounted for 7.7%.

### *Discussion of hypotheses*

As mentioned above, there were three hypotheses generated for this study. These hypotheses were (1) there is no difference between those members of collegiate marching bands who have experienced flow versus those who have not; (2) Flow experiences are experienced more often in a performance setting than in a rehearsal setting; and (3) Flow experiences are reported more often in association with shows in which the participant finds enjoyment versus those they do not. Each of these will be address individually.

*1. There is no difference between those members of collegiate marching bands who have experienced flow versus those who have not.*

There were two measures within the study to determine if participants had experienced flow. These measures proved to be consistent as seen by the similar responses that resulted from each measure. Only three participants reported never having a flow experience. Any further research into the similarities or differences would not have been beneficial as the grouping sizes would have been 152 to three.

Based on the fact that no data was collected to directly address the stated hypothesis, we cannot make the determination whether to reject or to not reject this hypothesis as stated.

*2. Flow experiences are experienced more in a performance setting than in a rehearsal setting.*

There were no items or questions within the research packet that specifically addressed this hypothesis. Based on the fact that no data was collected to directly address

the stated hypothesis, we cannot make the determination whether to reject or to not reject this hypothesis as stated.

One question within the research, however, did elicit information to be able to guide the researcher to a basic assumption. Please note, since this subject was not directly addressed within the research, any suggested findings are merely assumptions as based on the information voluntarily offered by the participants.

The flow frequency measure consisted of two questions which were used to measure how often participants experienced flow. The second question stated, “In your most recent marching season, how many times did you feel you were in flow during the season?” This was an open ended question in which participants self-reported their response. Responses to this question came in one of three forms. Either the participant listed a percentage, an actual specific number, or they listed rehearsal or performance instances. For example, one participant responded to the question, “Usually with every show and at the Friday rehearsal.” Others responded in the same manner with every performance, always when performing, or every game. The researcher was able to code the responses to this questioning in such a way that it addressed the above hypothesis.

From the information gathered, 49 individuals specifically addressed the environment in which flow was experienced more often. Only two reported experiencing flow more often in rehearsals than in a performance. Based on this limited feedback, the researcher can only assume that this would also hold consistent for the remaining sample.

3. *Flow experiences are reported more often in association with shows in which the participant finds enjoyment versus those they do not.*

There were no measures contained in the study that elicited information on this topic nor did this information make itself known from the research. Therefore, this hypothesis cannot be accurately addressed.

Based on the fact that no data was collected to directly address the stated hypothesis, we cannot make the determination whether to reject or to not reject this hypothesis as stated.

#### *Discussion of research questions*

While the hypotheses are similar to the research questions that guided this research, the questions are asked in a way in which we can give a definitive answer. These too will be addressed individually.

##### *1. Do collegiate marching band participants experience flow?*

Simply put, the answer to this research question is yes, members of collegiate marching bands do experience flow. It is both the extent to which flow is experienced as well as the quality of the experience that this researcher feels is the next step of discovery. With only 14 in 155 experiencing all nine dimensions of flow, it would prove beneficial to discover if the experiences of those only reporting six out of the nine have the same quality of experience or not.

##### *2. In what type of setting were flow experiences more likely to occur? (rehearsal vs. performance vs. type of performance)*

As mentioned above in hypothesis two, this question cannot be directly answered. Again the researcher stresses the importance of this area as being one needed for further research.

##### *3. What are the factors that facilitate flow in a marching band setting?*

This question can be answered directly by using the findings of the flow facilitator measure. Those facilitators which participants perceived to be most important were *being mentally prepared, having fun performing, and having a positive attitude*. Those that they perceived as helping the least were *being alone before a performance, not being concerned about others around me and receiving a pep talk prior to a performance*. Knowing the flow facilitators for a given group can be an important element for any director. If it is known that having a positive attitude is an important factor, then the director can work to be sure he is enabling that type of attitude to result.

## CHAPTER V

### CONCLUSION

#### *Summary*

Jackson, who has worked extensively with Csikszentmihalyi in exploring flow experiences, has stated that sport presents a “special opportunity” for flow to occur and there are few other activities that are as apt to make flow happen (Jackson, 1999). Performing music is one of those exempted activities (Jackson, 1999)

Thus presents the basis for this study. Previous research on flow mainly uses athletes as the population. Very little research has been done involving music and of the research that exists, most use adolescents in a classroom setting as the population. The purpose of this study was to examine the flow experiences of members involved in collegiate marching bands.

It was hypothesized that (1) there is no difference between those members of collegiate marching bands who have experienced flow versus those who have not; (2) Flow experiences are experienced more often in a performance setting than in a rehearsal setting; and (3) Flow experiences are reported more often in association with shows in which the participant finds enjoyment versus those they do not.

There were also three research questions that guided the study. These questions were: (1) Do collegiate marching band participants experience flow? (2) In what type of setting were flow experiences more likely to occur? (rehearsal vs. performance vs. type



of performance) and (3) What are the factors that facilitate flow in a marching band setting?

The sample for this study was a convenience sample taken from members attending the 2005 Kappa Kappa Psi and Tau Beta Sigma National Convention in Lexington, KY. All active members of the fraternity and sorority attending the convention received a research packet within their convention registration packet. The research packet contained the consent to participate, a demographics questionnaire, the flow facilitator measure, the flow frequency measure and the Flow State Scale-2 (FSS-2) measure.

#### *Discussion of findings*

One of the major strengths of the study was that the sample was truly representative of the total population, if a representative sample could be pulled from a convenience sample. There were 123 colleges and universities represented at the convention that were evenly distributed across the United States. When considering the regional breakdown of members in attendance at the convention as compared to the regional breakdown of the survey sample, this further proves that the sampled that resulted for the study was a representative sample.

In 2004, Peterson conducted a study that compared the flow experiences of NCAA Division I athletes to intramural athletes (n=180). The athletes were given the same measures as the marching band participants of this study. Based on responses to the FSS-2, the athletes in Peterson's study reported having an autotelic experience as the most frequently experienced dimension of flow while a loss of self consciousness was reported as being the least frequently experienced characteristic (Peterson, 2004). Based

on these findings, it can be determined that the flow experiences of Division I athletes, intramural athletes and marching band members are the same. The overall results of the above mentioned dimensions in this study were identical to the findings in Peterson's study.

The creation of the flow dimensions rating based on the FSS-2 provided a more concise view of exactly how many dimensions of flow were experienced. The assumption was, as has been articulated through this study, that the experience of all nine dimensions results in what is to be considered the optimal experience. Within this study, according to the flow dimensions rating, the flow experiences of the sample were of varied intensities. Only 14 individuals experienced all nine dimensions, thus only 14 had the optimal experience. This finding is supported by the flow frequency measure where respondents were asked to rate how often they experienced flow of a five point Likert scale. There were 13 participants who reported always experiencing flow in this measure.

When looking at the flow facilitators, the top three perceived facilitators between the athletes and marching band participants only differed by one response. In Peterson's study (2004), the three facilitators reported as helping the most were *being prepared physically, being mentally prepared* and *having fun playing my sport*. This was for both Division I and intramural athletes combined. For the collegiate marching band members, the facilitators that were perceived as helping the greatest were *being mentally prepared, having fun performing, and having a positive attitude*. Therefore, both athletes and marching band members find merit in being prepared mentally and having fun in their chosen activity. Coaches and directors can use this information to their advantage. By ensuring that they are providing the students with environment that fosters these states,

the students will be more likely to have a positive experience and subsequently the potential for the optimal experience.

It is worth pointing out that even though athletes reported *being mentally prepared* and *having fun playing my sport* as two of the top three facilitators, the means of these two responses for the marching band members were actually higher than for the athletes.

In addition, of the 36 statements on the flow facilitator measure, the means of almost half of these questions were higher for marching band members than for the means reported for the Division I and intramural athletes combined. This suggests that certain facilitators could be more apt to produce a flow experience in a particular setting or with a certain population versus another.

#### *Research Flaws*

After the data had been collected, the researcher discovered two major flaws within the design that could have been prevented in the earlier stages of the research design. The reason for this limitation was merely the knowledge base of the researcher at different stages of the study.

When the researcher originally developed chapters one through three, it was done exactly replicating Peterson's 2004 study. While the same measurement instruments were used, it was never the intention of the research to have two comparison groups. This caused the design of the study to be incorrect including the original statements of how statistics would be analyzed as well as the formation of the first hypothesis. The researcher realized this error after the data had been collected. Therefore, the

methodology was corrected after data collection to accurately represent how this study was carried out.

Another flaw within this study was the original formation of the hypotheses. The research attributes this flaw to a better understanding of research design in later stages of this study. In the original development of the hypotheses, the researcher only hypothesized that which was expected to be true based on what was to be the outcome of exploring marching band members and flow. However, the researcher did not take into account the measurement instruments that would be used in the study. Therefore, the hypotheses as stated in this study are not able to be supported as there were no measures in the study to accurately collect that information.

#### *Replication Recommendations*

The researcher can offer several suggestions in the event that this study should be considered for replication. In this study, respondents were asked to recall a flow experience almost seven months after their marching band season had ended. If the entire season should be taken into account, the researcher suggests the data be collected immediately at the conclusion of the marching season. It is also suggested that a single performance or rehearsal, not an entire marching season, be the event to be reported on. Therefore, data would be collected immediately following the conclusion of that event.

Those wishing to replicate this study may choose to do so in a different manner. The national convention was chosen as a convenience sample. However, this study could have also been conducting using entire marching bands from across the country instead of just those that chose to attend the convention and participate in the study. Cooperation would be needed from the directors of the various ensembles.

The method of collecting data could also be taken into consideration. It was decided to place research packets in the convention registration packets mainly for convenience. Those wishing to replicate the study may consider additional formats in which to collect data which may lead to a greater sample number.

There are additional questions that the researcher would include in the demographics questionnaire to gain additional information from the participants. The first question is, "Do you voluntarily participate in marching band?" The reasoning for this question is that some music majors are required to participate in marching band for a dictated length of time. If a flow experience only results out of those activities the participant freely engaged in and are intrinsically rewarding, does the fact that the individual is required to participate have any effect on their flow experiences?

Along the same lines, the researcher would have liked to inquire the reasons for participating in marching band. If the individual is not required to participate as in the case of some music majors, what is it about the activity that motivates them to participate? Do their reasons for engaging in the activity align with the definitions of a leisure experience?

Finally, the researcher believes there would be merit in the inclusion of a question asking respondents to describe their flow experiences. This would give the respondents the opportunity to self respond and give the researcher a greater understanding of the flow experiences.

#### *Areas for further research*

Based on this study, there are a few additional areas which could be considered for further research. The rehearsal versus performance experience of flow is one of these

areas. Both of these venues present very unique experiences. If the trend as suggested in this study of flow being experience more in performance settings is accurate, then what is it about the performance that lends itself to a flow experience more than the rehearsal setting?

While the purpose of this study was not to examine the actual quality of the flow experiences, it does lend itself to an area in which further study is warranted. Was the experience of the 14 individuals of a higher quality than the 35 individuals who only experienced 8 dimensions instead of 9? Should we also take into consideration the 47 individuals who only experienced five to six dimensions? Is it still considered flow if all nine dimensions are not experienced?

The researcher believes there would be merit in the exploration as to whether there are circumstances inherent in an activity that prevent an individual from experiencing flow. If this proves to be true, does this bar participants in these activities from the potential of ever achieving a flow experience?

There are two populations that should be considered for further research on this topic. First, the researcher believes it would be interesting to compare the flow experiences between those individuals involved in marching bands from historically black colleges and universities (HBCU) versus those who do not attend those institutions. The marching band show styles of the HBCU marching bands are much more athletic and high energy. The researcher believes that this setting could lead individuals to greater or more frequent flow experiences.

Further research should also consider using those involved in Drum Corp International as the population for study. Those involved in Drum Corp spend an entire

summer rehearsing and performing one 11-minute show. The intensity level is very high and the difficulty level of the shows is much higher than those performed at half time of a football game (AboutDCI, n.d.). The performances of Drum Corp shows are structured in such a way that the potential to experience flow in every performance is not out of the realm of possibility.

*Recommended uses of this study*

This study explored the dimensions and facilitators that students experience in relation to flow. Utilizing the concept of flow in rehearsal and performance settings can result in a greater efficiency for the director and the students. In addition, it can result in an overall enhanced experience for all those involved. The challenge skill balance also holds potential for use in a rehearsal and performance setting. If total involvement can be accomplished through a balance of challenge and skill, then the director can track the overall group progress. As their skills increase, the director can then increase the challenge so that the members do not become bored. Along the same lines, if the director presents a rehearsal setting that is too challenging for the members, they will become frustrated and anxious which results in an unproductive rehearsal.

Csikszentmihalyi has even been quoted as saying that flow is, ““being completely involved in an activity for its own sake. The ego falls away. Time flies. Every action, movement, and thought follows inevitably from the previous one, like playing jazz. Your whole being is involved, and you're using your skills to the utmost (Brainchannel, 2000).” If flow is like playing jazz, then who better than musicians to help define what a flow experience is like.

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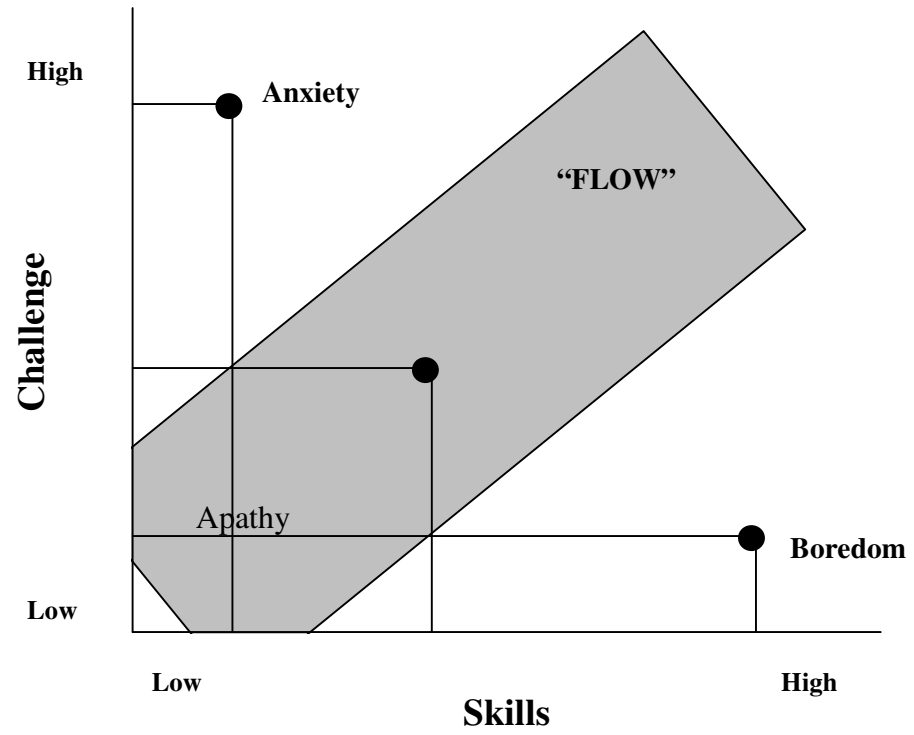
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## APPENDIX A

### VISUAL REPRESENTATION OF THE CHALLENGE SKILL BALANCE

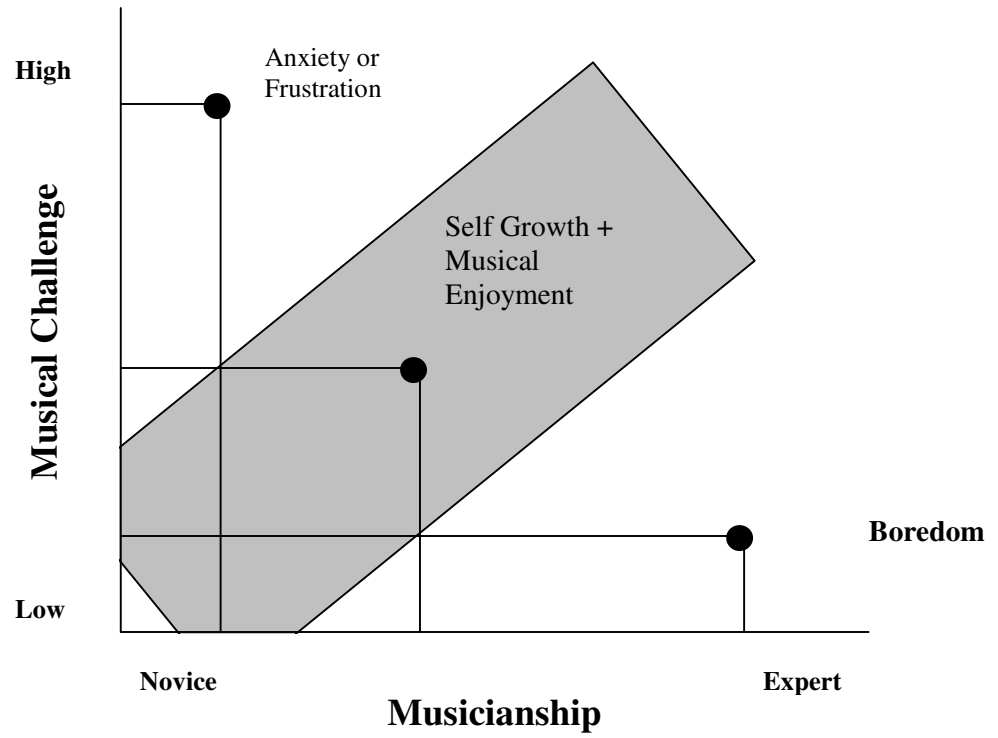
## Visual Representation of the Challenge-Skill Balance



APPENDIX B

ELLIOT'S MUSIC FLOW MODEL

**Elliot's Music Flow Model (1995)**  
as adapted from Csikszentmihalyi's original flow diagram



APPENDIX C  
IRB APPROVAL LETTER

## Oklahoma State University Institutional Review Board

Date: Thursday, June 30, 2005  
IRB Application No ED05127  
Proposal Title: The Exploration of Flow Among Collegiate Marching Band Participants

Reviewed and Exempt  
Processed as:

**Status Recommended by Reviewer(s): Approved Protocol Expires: 6/29/2006**

Principal  
Investigator(s)

Carolyn L. Steckel  
1925 E. Elm  
Stillwater, OK 74074

Christine Cashel  
434 Willard Hall  
Stillwater, OK 74078

---

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.


The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 415 Whitehurst (phone: 405-744-5700, beth.mcternan@okstate.edu).

Sincerely,



Sue C. Jacobs, Chair  
Institutional Review Board



APPENDIX D  
COVER LETTER AND CONSENT FORM

Dear student,

As all members of a marching band can tell you, performances and rehearsals have the ability to provoke a number of emotions. At times it can provide an experience where every movement falls into place, every set locks and the time from beginning to end just seems to fly by. Being “in the zone” is often a common way of explaining the concept of flow.

Flow is defined as an intrinsically motivating experience for an individual where total absorption in an activity occurs to the point that all other distractions disappear.

I am conducting a study on the experiences of flow in collegiate marching band members.

You have been given this packet with the hope that you will volunteer to be a participant in this study. In order to participate, you must be at least 18 years of age and have participated in a collegiate marching band. By completing the survey, you are verifying that you meet these criteria and consent to participate in this study.

Within this packet is a sheet that informs you of your rights as a participant of this study. Please note that all information being collected is completely anonymous. None of the materials you are being asked to fill out ask for your name or any information which could potentially identify you as the participant. As a voluntary participant in this study, you have the right to withdraw at any time.

All information provided to the researcher will also be kept strictly confident. Throughout the duration of the convention, at the close of each day, all collected survey packets will be kept within their envelopes and stored in the personal hotel room of the researcher. Upon completion of the national convention, all research packets will be stored in the personal home office of the researcher and the researcher will be the only individual with access to this material. Research packets will be kept for one year.

Only group data will be reported from the information collected. This data will appear in chapter 4 of the researcher’s thesis as required for completion of a master’s degree.

Please complete the survey independently and on your own time. Answer as honestly as possible to all questions on the survey. There are no correct or incorrect answers.

Upon completion of the survey packet, I ask that you place the survey materials back into the 6X9 envelope in which you found them and return it to the collection box located within National Headquarters Office where you picked up your registration packet.

I will be available in the National Headquarters office throughout the duration of the convention to answer any questions. You may also contact Dr. Christine Cashel who is advising the researcher and guiding the thesis experience.

Thank you for your time and in advance for your participation in this study.

Sincerely,

A handwritten signature in black ink that reads "Carolyn L. Steckel". The signature is written in a cursive style with a large, decorative flourish at the end.

Carolyn L. Steckel, Master's Candidate  
Oklahoma State Univ.  
Leisure Services Management  
(724) 612-1093  
[carolyn.steckel@okstate.edu](mailto:carolyn.steckel@okstate.edu)

Dr. Christine Cashel, PhD  
Professor, Oklahoma State Univ.  
Leisure Studies  
(405) 744-6815  
[ccashel@okstate.edu](mailto:ccashel@okstate.edu)

CONSENT TO PARTICIPATE IN REASEARCH STUDY  
*Rights as a Participant*

**Project Title:** The Exploration of Flow among Collegiate Marching Band Participants

**Investigators:** Carolyn L. Steckel, B.A.

**Purpose:** This study, which is research conducted for a master's thesis, is being conducted through Oklahoma State University. The purpose is to explore to what extent musicians experience flow. To the knowledge of the author, no study has been conducted exploring flow in the collegiate marching band setting.

**Procedures:** The project will involve completion of several questionnaires. The first will ask for demographic information such as your age, year in school and number of years in marching band. The second will evaluate your event experience in relation to marching band. The third will measure the frequency of flow experiences and the fourth will measure the facilitators of the flow experiences.

Filling out the surveys will last no longer then 45 minutes.

**Risks of Participation:** There are no risks associated with this project including stress, psychological, social, physical or legal risk. If, however, you begin to experience discomfort or stress in this project, you may end your participation at any time.

**Benefits of Participation:** The main benefit to the participant is helping others to understand a type of experience which has not yet been investigated.

**Confidentiality:** All information collected is completely anonymous and will be kept confident and not released. Neither the surveys nor the background questionnaire being filled out ask for your name or any information which could potentially identify you as the participant. Information will be collected via questionnaires which will be distributed in each member's convention participant's packet. The students will be asked to return the research packets in the envelope they received them in to a collection box located within the national headquarters office at the convention site. Throughout the duration of the convention, at the close of each day, all collected survey packets will be kept within their envelopes and stored in the personal hotel room of the researcher.

Upon completion of the national convention, all research packets will be stored in the personal home office of the researcher and the researcher will be the only individual with access to this material. The research packets will be kept a duration of five years following the collection of the data. After one year, the packets will be shredded and disposed of.

The information gathered from the questionnaires will be reported in Chapter Four of the researcher's thesis for a master's degree.

**Compensation:** You will receive no compensation of any sort if you choose to be a participant of this study.

**Contacts:** You may contact the researcher in the National Headquarters office at any time throughout the duration of the convention. If the researcher is not available, you may contact her via phone at (724) 612-1093.

**Participant's Rights:** I understand that my participation is voluntary, that there is no penalty for refusal to participate, and that I am free to withdraw my consent and participation in this project at any time, without penalty.

**Consent Documentation:** What you have just read has informed you of your rights as a participant. *This study is completely anonymous. By completing the enclosed survey packet, you thereby consent to be a participant of the study.*

APPENDIX E  
DEMOGRAPHIC QUESTIONNAIRE

Demographic Questionnaire

Age \_\_\_\_\_

Gender \_\_\_\_\_

Major \_\_\_\_\_

Please circle the year in school you have just completed

**Freshman**

**Sophomore**

**Junior**

**Senior**

Please circle your district:

**Northeast**

**Southeast**

**North Central**

**Midwest**

**Southwest**

**Western**

What instrument(s) do you play?

How many years have you been involved in music in some capacity?

How many years have you been involved in a marching band?

Are you a member of any other band within the University setting other than marching band? If so, please specify the type of band (i.e. concert band, jazz band, pep band, wind ensemble).

Are you a member of any other music ensembles outside of the University setting? (i.e. community band, drum corp)

How many members are in your marching band?

Please circle which word best describes the style of your marching band?

Show

Military

Corp

Other (please explain)

How many students attend your college or university?



APPENDIX F

FLOW STATE SCALE-2

Used with permission from S.A. Jackson (2001)

## Event Experience Scale (FSS-2)

Please answer the following questions in relation to your experience in the event or activity you have just completed. These questions relate to the thoughts and feelings you may have experienced while taking part. There are no right or wrong answers. Think about how you felt during the event/activity and answer the questions using the rating scale below. For each question circle the number that best matches your experience.

### Rating scale

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1	2	3	4	5

PLEASE CIRCLE ANSWER

#### During the Event:

1. I was challenged, but I believed my skills would allow me to meet the challenge.

1	2	3	4	5
---	---	---	---	---

2. I made the correct movements without thinking about trying to do so.

1	2	3	4	5
---	---	---	---	---

3. I knew clearly what I wanted to do.

1	2	3	4	5
---	---	---	---	---

4. It was really clear to me how my performance was going.

1	2	3	4	5
---	---	---	---	---

5. My attention was focused entirely on what I was doing.

1	2	3	4	5
---	---	---	---	---

6. I had a sense of control over what I was doing.

1	2	3	4	5
---	---	---	---	---

7. I was not concerned with what others may have been thinking of me.

1	2	3	4	5
---	---	---	---	---

8. Time seemed to alter (either slowed down or speeded up).

1	2	3	4	5
---	---	---	---	---

9. I really enjoyed the experience.

1	2	3	4	5
---	---	---	---	---

10. My abilities matched the high challenge of the situation.

1	2	3	4	5
---	---	---	---	---

11. Things just seemed to be happening automatically.

1	2	3	4	5
---	---	---	---	---

12. I had a strong sense of what I wanted to do.

1	2	3	4	5
---	---	---	---	---

13. I was aware of how well I was performing.

1	2	3	4	5
---	---	---	---	---

14. It was no effort to keep my mind on what was happening.

1	2	3	4	5
---	---	---	---	---

15. I felt like I could control what I was doing.

1	2	3	4	5
---	---	---	---	---

16. I was not concerned with how others may have been evaluating me.

1	2	3	4	5
---	---	---	---	---

17. The way time passed seemed to be different from normal.

1	2	3	4	5
---	---	---	---	---

CONTINUES OVER

**Rating scale**

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree <sup>®</sup>
1	2	3	4	5

*PLEASE CIRCLE ANSWER*

**During the Event:**

18. I loved the feeling of the performance and want to capture it again.

1	2	3	4	5
---	---	---	---	---

19. I felt I was competent enough to meet the high demands of the situation.

1	2	3	4	5
---	---	---	---	---

20. I performed automatically, without thinking too much.

1	2	3	4	5
---	---	---	---	---

21. I knew what I wanted to achieve.

1	2	3	4	5
---	---	---	---	---

22. I had a good idea while I was performing about how well I was doing.

1	2	3	4	5
---	---	---	---	---

23. I had total concentration.

1	2	3	4	5
---	---	---	---	---

24. I had a feeling of total control.

1	2	3	4	5
---	---	---	---	---

25. I was not concerned with how I was presenting myself.

1	2	3	4	5
---	---	---	---	---

26. It felt like time went by quickly.

1	2	3	4	5
---	---	---	---	---

27. The experience left me feeling great.

1	2	3	4	5
---	---	---	---	---

28. The challenge and my skills were at an equally high level.

1	2	3	4	5
---	---	---	---	---

29. I did things spontaneously and automatically without having to think.

1	2	3	4	5
---	---	---	---	---

30. My goals were clearly defined.

1	2	3	4	5
---	---	---	---	---

31. I could tell by the way I was performing how well I was doing.

1	2	3	4	5
---	---	---	---	---

32. I was completely focused on the task at hand.

1	2	3	4	5
---	---	---	---	---

33. I felt in total control of my body.

1	2	3	4	5
---	---	---	---	---

34. I was not worried about what others may have been thinking of me.

1	2	3	4	5
---	---	---	---	---

35. I lost my normal awareness of time.

1	2	3	4	5
---	---	---	---	---

36. I found the experience extremely rewarding.

1	2	3	4	5
---	---	---	---	---

APPENDIX G  
FLOW FREQUENCY MEASURE

Flow is defined as an intrinsically motivating experience for an individual where total absorption of an activity occurs to the point that all distractions disappear.

**Keeping in mind the above description of flow, please answer the following questions (circle one).**

**1. In your most recent marching season, how often did you experience flow?**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
always		sometimes		Never

**2. In your most recent marching season, how many times did you feel you were in flow during the season?**

APPENDIX H  
FLOW FACILITATOR MEASURE

Flow is defined as an intrinsically motivating experience for an individual where total absorption in an activity occurs to the point that all other distractions disappear.

Keeping in mind the above description of flow, please rate the extent to which each factor helps you potentially achieve flow. Rate each factor using the scale below and circle the number that reflects your feelings.

1	2	3	4	5
Does not help at all	Helps a small amount	Helps a fair amount	Helps a good amount	Helps a great deal

1.	Being prepared physically	1	2	3	4	5
2.	Being mentally prepared	1	2	3	4	5
3.	Rehearsing my physical game plan	1	2	3	4	5
4.	Mentally rehearsing my game plan	1	2	3	4	5
5.	Having a consistent pre-performance routine	1	2	3	4	5
6.	Being along before a performance	1	2	3	4	5
7.	Feeling confident with my knowledge of possible competition	1	2	3	4	5
8.	Feeling confident in my ability to perform	1	2	3	4	5
9.	Feeling that my confidence builds before a performance	1	2	3	4	5
10.	Having a positive attitude	1	2	3	4	5
11.	Blocking out negative thoughts	1	2	3	4	5
12.	Having fun performing	1	2	3	4	5
13.	Enjoying my role in the group	1	2	3	4	5
14.	Knowing I'm prepared through practice	1	2	3	4	5
15.	Having good pre-performance nutrition	1	2	3	4	5
16.	Being physically rested	1	2	3	4	5
17.	Being physically relaxed in a performance	1	2	3	4	5
18.	Getting energized before a performance	1	2	3	4	5
19.	Being mentally relaxed before a performance	1	2	3	4	5
20.	Physically feeling good in warm up	1	2	3	4	5
21.	Setting and accomplishing goals	1	2	3	4	5
22.	Having a clear game plan	1	2	3	4	5
23.	Being motivated to play well for others	1	2	3	4	5

24.	Concentrating on the game plan	1	2	3	4	5
25.	Not being concerned about others around me	1	2	3	4	5
26.	Performing skills automatically	1	2	3	4	5
27.	Having good environmental conditions (setting, audience)	1	2	3	4	5
28.	Having good awareness of the environment	1	2	3	4	5
29.	Getting positive feedback during the performance	1	2	3	4	5
30.	Receive a pep talk prior to performance	1	2	3	4	5
31.	Having positive feedback during practice	1	2	3	4	5
32.	Group getting pumped up	1	2	3	4	5
33.	Having positive interaction with the group	1	2	3	4	5
34.	Talking with others in the group	1	2	3	4	5
35.	Being around the group	1	2	3	4	5



APPENDIX I  
LIST OF COLLEGES AND UNIVERSITIES

Schools represented at the 2005 Kappa Kappa Psi and Tau Beta Sigma  
National Convention

Albion College	Mansfield University	University of Central Arkansas
Angelo State University	Marshall University	University of Central Florida
Appalachian State University	McNeese State University	University of Cincinnati
Arizona State University	Mississippi State University	University of Colorado at Boulder
Ashland University	Montana State University	University of Connecticut
Auburn University	Morgan State University	University of Florida
Baylor University	Mount Union College	University of Georgia
Blinn College	NC A&T State University	University of Houston
Bloomsburg University	Norfolk State University	University of Kentucky
Boise State University	North Carolina Central University	University of LA at Monroe
Boston University	Northeastern State University	University of Louisville
Bowling Green State University	Northern Arizona University	University of Maryland
Butler University	Northern Illinois University	University of Massachusetts
California Polytechnic State Univ.	Northwest Missouri State University	University of Miami
California State University, Fresno	Northwestern State University of LA	University of Michigan
California University of PA	Ohio Northern University	University of Missouri, Rolla
Central State University	Ohio University	University of Missouri-Columbia
Clarion University of PA	Oklahoma State University	University of Nebraska at Lincoln
Clemson University	Ouachita Baptist University	University of Nebraska at Omaha
Delaware State University	Purdue University	University of Nebraska, Kearney
Eastern Illinois University	Sacred Heart University	University of New Hampshire
Eastern Michigan University	Sam Houston State University	University of Northern Colorado
Emporia State University	San Diego State University	University of Northern Iowa
Florida A&M University	Shippensburg University of PA	University of Oklahoma
Florida International University	Southwest Missouri State University	University of Pittsburgh
Florida State University	SUNY at Buffalo	University of Rhode Island
Georgia Institute of Technology	Syracuse University	University of South Carolina
Georgia Southwestern State Univ.	Texas A&M University	University of South Florida
Henderson State University	Texas A&M at Kingsville	University of Texas at Austin
Howard Payne University	Texas Southern University	University of Texas at Arlington
Howard University	Texas State at San Marcos	University of Toledo
Indiana State University	Texas Tech University	University of Utah
Indiana University	The Ohio State University	University of Virginia
Iowa State University	Tiffin University	University of Washington
James Madison University	Troy University	University of Wyoming
Kansas State University	Tuskegee University	Vanderbilt University
Kent State University	UCLA	Virginia Polytechnic & State Univ.
Kentucky State University	University of Akron	Virginia State University
Kutztown University	University of Arizona	Washington State University
Lehigh University	University of Arkansas	West Texas A&M University
Lock Haven University	University of California at Irvine	West Virginia University

APPENDIX J  
LISTING OF STATES BY REGION

The Midwest region is comprised of the following states: Colorado, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, North Dakota, South Dakota, and Wyoming.

The Northeast region is comprised of the following states: Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia.

The North Central region is comprised of the following states: Illinois, Indiana, Kentucky, Michigan, Ohio, and Wisconsin.

The Southeast region is comprised of the following states: Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee.

The Southwest region is comprised of the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

The Western region is comprised of the following states: Alaska, Arizona, California, Hawaii, Idaho, Nevada, Oregon, Utah, and Washington.

APPENDIX K

LIST OF MAJORS BY UNIVERSITY CATEGORY

*Music* – music education, music performance, music business

*Arts and Sciences* – Journalism, communication sciences and disorders, psychology, English, theater, chemistry, social sciences

*Health Sciences* – Anatomy, bio chemistry, microbiology, pathology, pharmaceutical, physiology, pre-med

*Education* – Any form of education, not including music education

*Engineering* – Bio medical, computer, electrical, aerospace

*Business* – Management information systems, economics, marketing, accounting, business management

*Human Environmental Sciences* – Interior design, merchandising, nutrition, hotel and restaurant management, human development, family sciences

*Undecided*

*Other* – Veterinary medicine, forestry

APPENDIX L

MEAN AND STANDARD DEVIATIONS FOR FLOW FACILITATOR MEASURE

Facilitator	M	SD
Being prepared physically	4.37	0.81
Being mentally prepared	4.77	0.54
Rehearsing my game plan	4.01	1.04
Mentally rehearsing my game plan	4.34	0.89
Having a consistent pre-performance routine	3.76	1.16
Being alone before a performance	2.48	1.30
Feeling confident with my knowledge of possible competition	3.58	1.20
Feeling confident in my abilities to perform	4.59	0.60
Feeling that my confidence builds before a performance	4.26	0.84
Having a positive attitude	4.68	0.70
Blocking out negative thoughts	4.11	1.11
Having fun performing	4.81	0.49
Enjoying my role in the group	4.60	0.65
Knowing I'm prepared through practice	4.42	0.71
Having good pre-performance nutrition	3.42	0.71
Being physically rested	3.85	1.08
Being physically relaxed in a performance	3.74	0.96
Getting energized before a performance	4.35	0.81
Being mentally relaxed before a performance	3.84	1.02
Physically feeling good in warm up	4.02	0.88
Setting and accomplishing goals	3.97	1.07
Having a clear game plan	4.02	1.02
Being motivated to play well for others	4.12	1.05
Concentrating on the game plan	3.97	1.01
Not being concerned about others around me	3.21	1.32
Performing skills automatically	4.07	0.95
Having good environmental conditions	4.17	0.93
Having good awareness of the environment	4.01	1.01
Getting positive feedback during the performance	4.21	0.96
Receive a pep talk prior to performance	3.43	1.16
Having positive feedback during practice	4.22	0.87
Group getting pumped up	4.3	0.89
Having positive interaction with the group	4.52	0.64
Talking with others in the group	4.09	0.94
Being around the group	4.32	0.88



APPENDIX M  
DESCRIPTIVE STATISTICS FOR THE FSS-2

Descriptive Statistics for the FSS-2

<i>FSS-2 Statement</i>	<i>M</i>	<i>SD</i>
I was challenged, believed my skills would allow me to meet the challenges	3.94	1.00
I made the correct movements without thinking about trying to do so	3.87	0.92
I knew clearly what I wanted to do	4.22	0.76
It was really clear to me how my performance was going	4.11	0.74
My attention was focused entirely on what I was doing	3.78	1.03
I had a sense of control over what I was doing	4.10	0.82
I was not concerned with what others my have been thinking of me	3.53	1.20
Time seemed to alter (either slowed up or speeded up)	4.05	0.97
I really enjoyed the experience	4.51	0.72
My abilities matched the high challenge of the situation	4.10	0.80
Things just seemed to be happening automatically	3.82	0.92
I had a strong sense of what I wanted to do	4.12	0.73
I was aware of how well I was performing	4.12	0.70
It was not effort to keep my mind on what was happening	3.62	1.06
I felt like I could control what I was doing	3.98	0.80
I was not concerned with how others may have been evaluating me	3.31	1.18
The way time passed seemed to be different then normal	3.87	1.02
I loved the feeling of the performance and want to capture it again	4.49	0.81
I felt I was competent enough to meet the high demands of the situation	4.40	0.65
I performed automatically without thinking too much	3.99	0.85
I knew what I wanted to achieve	4.27	0.76
I had a good idea while I was performing about how well I was doing	4.19	0.66
I had total concentration	3.65	0.95
I had a feeling of total control	3.68	0.90
I was not concerned with how I was presenting myself	2.72	1.24
It felt like time went by quickly	3.56	1.07
The experience left me feeling great	4.30	0.78
The challenge and my skills were at an equally high level	3.87	0.95
I did things spontaneously and automatically without having to think	3.79	0.96
My goals were clearly defined	4.00	0.86
I could tell by the way I was performing how well I was doing	4.03	0.68
I was completely focused on the task at hand	3.72	0.90
I felt in total control of my body	3.90	0.83
I was not worried about what others may have been thinking of me	3.31	1.18
I lost my normal awareness of time	3.54	1.04
I found the experience extremely rewarding	4.44	0.82

## VITA

Carolyn L. Steckel

Candidate for the Degree of

Master of Science

Thesis: AN EXPLORATION OF FLOW AMONG COLLEGIATE MARCHING  
BAND PARTICIPANTS

Major Field: Leisure Studies

Biographical:

Personal Data: Born in Pittsburgh, Pennsylvania on October 21, 1979, the daughter of Lawrence and Diana Steckel.

Education: Graduated from North Allegheny Senior High School, Wexford, Pennsylvania in June 1997; received Bachelor of Arts degree in Popular Culture from Bowling Green State University, Bowling Green, Ohio in May 2001. Completed the requirements for the Master of Science degree with a major in Leisure Studies at Oklahoma State University, Stillwater, Oklahoma in May, 2006.

Experience: Primary work experience includes a variety of outdoor settings. Other experience includes retail and administrative work.

Professional Memberships: American Therapeutic Recreation Association, Illinois Recreation Therapy Association, National Therapeutic Recreation Society, National Recreation and Park Association, American Camping Association

Name: Carolyn L. Steckel

Date of Degree: May 2006

Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Title of Study: AN EXPLORATION OF FLOW AMONG COLLEGIATE MARCHING  
BAND PARTICIPANTS

Pages in Study: 83

Candidate for the Degree of Master of Science

Major Field: Leisure Studies

Scope and Method of Study: The purpose of the study was to explore the extent to which musicians experience flow. While much research has been done in relation to athletes in flow, very little has been done using music as a basis, especially on the collegiate level. Participants for this study were 155 college students attending the 2005 Kappa Kappa Psi and Tau Beta Sigma National Convention. Each participant received a survey packet that included a demographics questionnaire, the Flow State Scale-2, a flow frequency measure and a flow facilitator measure. This study used purely descriptive statistics to discuss the findings.

Findings and Conclusions: Collegiate marching band members do in fact experience flow. However, they all experience it in varying intensities. Csikszentmihalyi said that in experiencing all nine dimensions of flow, you are having the optimal experience. In this study, only 14 students out of 155 experienced what is considered the optimal. About 35 experienced 8 dimensions and about 45 experienced 5 to 6 dimensions. The flow dimension that was experienced most was an autotelic experience. The one that was experienced the least was the loss of self consciousness. The findings from this study were actually congruent to the findings of flow experience of collegiate athletes in the 2004 Peterson study. It can be assumed then, that collegiate marching band participants have the same flow experiences as athletes. The facilitators that students perceived as being the most important were having fun performing, being mentally prepared and having a positive attitude. The athletes in the above mentioned study also had being mentally prepared and having fun performing their sport as their top two facilitators. However, marching band participants rated these even higher than the athletes did.

ADVISER'S APPROVAL: Dr. Christine Cashel

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