

The Effects of New Players on Team Cohesion

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Tech Softball

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Abstract

This study will explore how Virginia Tech softball players learn to work cohesively each year. This study aims to enable the athletes to reflect on their team's and personal ability to work cohesively each year. As well as gaining an understanding of how they can improve their learning processes to work together as new members join, some remain, and others leave annually. Using Tuckman's Stages of Group Development, this study's framework aims to help understand the evolution of a team and the stages of team development. The stages of the Tuckman model are forming, storming, norming, performing, and adjourning. Participants for this study contained 10 Virginia Tech softball student-athletes who participated in the program between 2018-2023. Each participant contributing to the semi-structured interviews was asked pre-selected questions and was reviewed as one team. After each interview, transcripts were reviewed and analyzed for themes. After the analysis of all interviews was examined, three themes emerged. These themes were: Meeting high standards with an evolving culture and leadership, developing relationships effects on and off the field performance, and facing challenges with roles and adversity. The Tuckman model and the research question served as a guide to understanding better how the team learns to work cohesively each year and what they can learn from that knowledge. This study can be used for other sports teams and other researchers interested in the effects of new teammates and a changing dynamic each year on a team's ability to work cohesively. Therefore, further research can be done to understand how facing individual and team shortcomings affect team cohesion.

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Chapter 1: Introduction

Imagine you are eighteen years old, taking your first steps on a college campus for a recruiting visit, being taken away with a car full of your future teammates, and they ask you this question, can you see yourself here? You are probably stuck thinking, what do they want to hear because you know first impressions are everything. Many college student-athletes may have run into this thinking or have tried to self-present themselves to get the right foot forward when joining a new team. Most student-athletes come in wanting to be an asset to their team. It is in the athlete's nature to have motivations (Hambrick et al., 2018). Also, it is a basic psychological need to belong as humans (Allen et al., 2021).

Motivation and cohesion have proven to influence persistence, learning, and the overall performance of a successful team. Therefore, a sports team that fosters intrinsic motivations can positively affect both types of cohesion, social and task cohesion, on their team (Halbrook et al., 2012). In addition, cohesion can play a role in team effectiveness, allowing everyone to feel a part of the team's success. Researchers define cohesion as "a dynamic process that is reflected in the tendency for a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs" (Halbrook et al., 2012).

Team cohesion can be very important for a sports team to achieve because it can lead to more team success. When a team can work more cohesively, it is predicted that players can receive social support. Which intel increases the sense of belonging and security (Gu & Xue, 2022). However, different types of cohesion (social and task) can set a team apart from another's team cohesion. Teams with higher task cohesion levels will outperform those with higher social cohesion levels. Therefore, the researchers identify social and task cohesion with statistical significance in team sports (Hambrick et al., 2018).

There are many challenges faced by athletes in team sports that affect their team cohesion. One is that there are multiple players. When multiple players are involved, conflict is open due to different backgrounds, understandings of one another, goals, or other reasons. It can be useful for the teammates to understand how to collaborate and interact with one another. In team sports, players must compete and cooperate with their teammates or will likely fail to reach their common goals even if competing for the same position with the same teammates. Often, coaches see this competition to increase performance, possibly affecting team cohesion. Teammates must learn to work with new or existing team members to be successful (Landkammer et al., 2019).

When discovering what makes a new team work cohesively, it is also essential to investigate what the team dynamic looks like. Competitive teams will face several challenges affecting team dynamics, including the ability to work cohesively. Other notable challenges faced by athletes that affect the team's dynamic are that they are trying to compete with their new and veteran teammates for a spot on the field while having personal differences. Understanding how new and veteran players affect a team dynamic makes it necessary to investigate and manage early on as a newly developing team (Filho & Basevitch, 2021). In addition, the interactions with the new and veteran players can lead to the need to build trusting relationships and team leadership.

Athlete leadership is an essential factor in the influence of team cohesion and team structure. Establishing clear roles can affect team dynamics and the relationships between new and veteran players. Teammates in leadership positions can affect the integration of new players (Filho & Basevitch, 2021). Leaders on a team influence a team's collaboration, communication, and building of trusting relationships. Trust among team members is key to ensuring a team's

effectiveness. When a team has effective leaders, there is increased communication among team members, allowing members to decide or judge another member's trustworthiness—forming the basis for trust and leading to greater task performances when developing a new team (Boies et al., 2015).

Each year the Virginia Tech softball women's team has a new team: Some returning players and some new faces. As a result, there will always be areas of improvement for the team's cohesiveness. To close that gap between the returning and new players to the team each year, team members will need to understand what roles, expectations, and responsibilities are expected from them. This study will show how Virginia Tech softball players each year learn to work cohesively together.

Purpose Statement

The purpose of this project is to understand the importance of a team working cohesively on a collegiate athletic level, as well as learning what it takes for a new team to work cohesively. This study intends to help new teams work cohesively together. Posing the question: *How do Virginia Tech softball players each year learn to work cohesively with each other?*

Definitions of Key Terms

Challenge – a call to take part in a contest or competition, especially a duel (Oxford Languages, 2023).

Change – make (someone or something) different; alter or modify. (Oxford Languages, 2023).

Cohesion – a dynamic process that is reflected in the tendency for a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs (Halbrook et al., 2012).

College Sports Team – a collegiate level activity involving physical exertion and skill in which a group of players forming one side in a competitive game to compete against another.

Sports – an activity involving physical exertion and skill in which an individual or team competes against another or others for entertainment (Oxford Languages, 2023).

Team – a group of players forming one side in a competitive game or sport (Oxford Languages, 2023).

Teammates – a fellow member of a team (Oxford Languages, 2023).

Virginia Tech Softball – a collegiate softball organization.

Limitations of Project

One limitation that can be uncovered is that I have a personal affiliation with the Virginia Tech softball program: Creating the probability for bias based on my own experiences. However, some of my interview questions are based on my personal experiences because I will be the interviewer.

A second limitation to consider is that the people I interview will also be someone I had shared similar or different experiences with while on the same team. As well as interviewing individuals with which I did not personally play. Therefore, whether I have played with some of these players or not, there is a possibility for a lack of honesty because of my personal relationships with them or lack thereof.

A third limitation of this study is that some players have played for the previous coaching staff, causing differences in their first-year experiences with the team. However, with an annually changing team, all teams are different dynamically regardless of the coaching staff. This is not to say that the changing of coaching staff does not play a role in the team dynamically each year. However, this study directly aims and only focuses on the players rather than the coaching staff. Therefore, to limit this risk and limitation, participants will only be asked to focus on their experiences from 2018-2023 under a single head coach during this time.

Chapter 2: Literature Review

Cohesion, team dynamic, changing team dynamic, team-based sports, college sports, leadership roles, and Virginia Tech Softball are the topics evaluated in this section. Cohesion is commonly thought of as a group of people that like each other. However, that is not exactly right, but there are many different definitions of cohesion. Franz (2012) defines *cohesion* as “a group concept that results from attraction to a group and work within a group.” For an annually changing team, the players need to be able to work together sooner to start establishing and working towards their goals or objectives.

Cohesion on a Team

Team cohesion is represented by each team member committed to team goals and understanding the task requirements, team procedures, and their role responsibilities (Edmondson & Harvey, 2017). Cohesion on a team is an important factor because it affects team performance, and the teams with higher levels of cohesion have better records than the lower-level cohesive teams (Beauchamp & Eys, 2014). Therefore, team cohesion plays a role in team performance and can affect a team’s effectiveness. Researchers compare two different types of cohesion, social and task cohesion. Social cohesion is represented by the social nature of cohesion, whereas task cohesion is represented by the goal-focused nature of cohesion (Acton et al., 2020). Researchers express that a group’s overall cohesion will include social and task-cohesive factors. However, members of a team do not have to like one another to be considered a well-cohesive group if they are committed to their task. Franz (2012) explains cohesion in a group or team as the “glue that makes the members of a group stick together,” such as having common goals.

To be a successful group, there must be a shared commitment to a shared purpose between all members of the group. In addition, team success can depend on the foundation of trust, a shared direction of the team, and strong relationships. Therefore, creating a bond and establishing connections early in the relationship-building process is extremely important because it develops trust and cohesion within a group (Aquino et al., 2022). The importance of cohesion in a small group is, historically, by some researchers as the most important variable (Curtin et al., 2016).

The need for the feeling of belonging dates to the adolescent stage. Starting from the self-concept of transitioning from the close environment of the parental home to a social world surrounded by new teammates. This can give a college athlete a similar feeling of belongingness when transitioning to college and college sports teams. However, new group members do not always lead to positive social experiences because existing members can have already built a strong bond, causing new members to feel alienated. Therefore, it is important to have a deep understanding of how a team integrates new members (Chamberlain et al., 2021).

Team Dynamic in Sports

In team sports, players competing for the same position affect a team's dynamic. Therefore, teams with high inter-competition will need to value improving their team dynamics as early as possible. For a team to improve its team's dynamics, it can start by establishing clear roles (Filho & Basevitch, 2021). For teams to work together, they must first set the stage. This includes going through an initial planning process. They should define norms, confirm expectations for one another, and appoint a facilitator (Franz, 2012). When clear roles are set, the ability to fully commit to these roles will help improve a team's dynamic. When wanting to

develop resilient and high-performing teams, teams need to work towards integration between new and veteran players (Filho & Basevitch, 2021). In the early stages of forming a new team, teams come together and develop through their members' interpersonal interactions. As the team continues through the teaming process, this will either help or hurt team performance; a team's diverse background can benefit a team or present challenges down the road (Edmondson & Harvey, 2017).

Changing Team Dynamic in Sports

It is crucial to study a changing team dynamically to focus on building teams and allow for the continuous management of a team's life cycle (Acton et al., 2020). Researchers often call this "team turnover." Many teams or organizations have a dynamic composition where new members join, and some previously existing members leave throughout a team's lifecycle. Turnover members are a positive or negative change for a team's dynamic because they can bring new perspectives; however, this can cause the team performance to struggle because they do not understand how the team functions yet. When it comes to newcomers to a team, most of the time and energy is built on socializing them with the team. However, researchers state the importance of focusing on team roles rather than the team member's implications of socialization. (Levi & Askay, 2021).

In college sports, teammates can have completely different backgrounds and from different areas. Therefore, they are people who may have never met or needed to work cohesively together normally, which creates interpersonal challenges. When researchers evaluate theories like social identity, social categorization, and similarity-attraction, they found that unclear or multiple social identities harm team cohesion. Knowing this information shows the

effects of innovation on a team because members will be more inclined to take risks if they feel they can anticipate others' reactions. Allowing a team to develop more trusting relationships (Edmondson & Harvey, 2017).

Before a new member joins a team, the investigation stage starts. Current members already create an idea of how they want the new members to contribute to their team, while the future member evaluates if the team can satisfy personal needs. When both parties are content, that is when the newcomer becomes a member of the team. New team members can feel stress from the socialization of a new team, which causes them to feel pressure to conform and be dependent on the other players, leading to an increase in acceptance by the current members of the team (Levi & Askay, 2021). However, on the other hand, new members can threaten power or the team's social hierarchy. Even when the team officially accepts a new member, they will still go through a "maintenance" stage, an ongoing process that negotiates their position and role on the team and the group's goals. Often team members try to change each other based on their perspectives. The more the team members can work together and integrate their knowledge, the better they will be able to coordinate their actions and be more effective. As well as they will be able to handle the stress, changes, and challenges they will face as the season progresses (Levi & Askay, 2021).

Leadership Roles

Leaders on team's face challenges in maintaining their team's cohesiveness, and they are tasked with ensuring constant effort to build cohesion within the team (Franz, 2012). Leadership is unlike a personality trait; we can grow and develop our leadership skills. Leaders can improve

their game and work on their craft, like in sports. When leadership is viewed as a set of skills, it allows people to study and practice being better at performing their job (Northouse, 2022).

Shared leadership disrupts team leadership across its members and encourages members to be more invested in their team. Shared leadership allows members to feel a shared sense of purpose and tend to focus on their goals. Team cohesion and productivity are outcomes of a team's leadership and design. Therefore, when new members are accepted into a group, teams built off community culture encourage members to apply their perspectives, skills, and interest to their group. For new teams, leadership can be demonstrated when members initiate transitioning a new member into the team. However, a team's leadership style should depend on the team's goals and context (Burt et al., 2022). Team structure and leadership roles are important in an athletic team.

Peer Leadership & Building Trusting Relationships

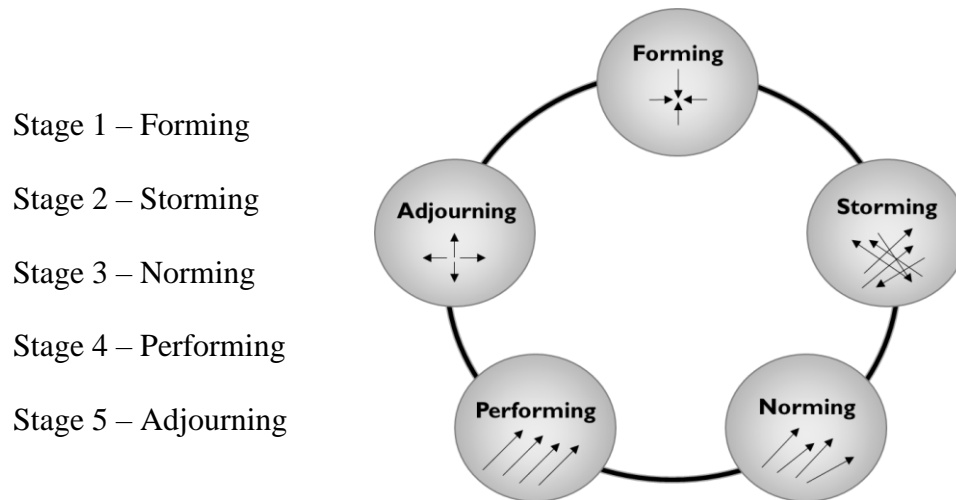
Peer leadership on a team helps integrate new members, influence a team's cohesion, and develop a task-oriented motivated team environment. Peer leadership is important to develop because it helps a team be a high-performing team and influences cohesion (Filho & Basevitch, 2021). Teams can measure their group integration on task and social cohesion to evaluate interactions and how close the team is concerning the teams' goals and objectives. Athlete leaders can affect both the task and social cohesiveness of their team. Therefore, athlete leaders should establish and maintain a shared group identity. Thinking like "we" or "us" instead of "I" or "me." Researchers study shared group identity as impacting cohesion within the team and leadership (Worley et al., 2020). Leadership roles within a team are either given or received by team members. Worley et al. (2020) explain athlete leadership as "an athlete occupying a formal

or informal role within a team who influences a group of team members to achieve a common goal.” Formal roles are official positions a team or organization establishes, such as a team captain. Informal roles emerge from team interaction, such as a team member providing advice or mentoring other teammates. Both formal and informal roles are important to athlete leadership in college sports. No matter an athlete’s leader’s role, they affect team cohesion. However, researchers added that when it comes to informal roles on an athletic team, the “more the merrier” as well as suggesting that 85% of the team should occupy a leadership role (Crozier, 2013).

Leaders can emerge and change throughout a team’s life cycle depending on what the team needs at that time. These leaders can influence their teammate’s behavior and introduce key objects during the teaming process. When a new setting changes throughout the teaming process, leaders can be used as a facilitator for conversations between teammates. This interaction and communication can help to clarify roles (Edmondson & Harvey, 2017). Smith (2015) explains that role clarity is very important to establish early in the teaming process for a sports team, and more clarity allows for more cohesion and collective efficacy. Another key component of team efficiency is through a team’s ability to communicate and build trusting relationships with one another. Leaders influence the outcome of the team’s communication and trust in teammates (Boies et al., 2015). Strong leaders on a team who clearly communicate goals, roles, and build trust help to avoid possible future conflicts, especially if done during the forming stage of the team’s life cycle (Franz, 2012).

Theoretical Framework

The Tuckman's Stages of Group Development was used for this study framework developed by Bruce Tuckman (Vaida & Şerban, 2021). Hall et al. (2019) explains this framework as something that aims to help understand the evolution of a team and the stages of team development. The stages of the Tuckman model are:



Stage 1 – Forming

Each stage of this model will explain a team's life cycle and how players learn to work cohesively together each year. By understanding each stage of the team's life cycle, a team can better understand how they learn to work cohesively with new and returning members. Forming is the first stage of a team's life cycle. Forming is often seen as the shared excitement of a team and the coming together for the first time of a newly assembled team (Hall et al., 2019). Every new school year in collegiate sports, the team starts out in the forming stage with new and returning members.

Stage 2 – Storming

Once a team gets over that honeymoon phase of forming, the team goes through what Tuckman calls storming. Storming occurs in a team's life cycle when team members are challenged by each other's differences in personalities, expectation, and struggle to learn how to balance those differences. For an annually changing team, conflict can arise between new and veteran players when new and existing personalities clash and boundaries are crossed. Each member on a sports team, new or returning, carries a unique skill set. However, if understood and respected by their other teammates, the team can develop shared ideas and learn to work collaboratively (Hell, 2022).

Stage 3 – Norming

When the clouds blow over, and the sun comes out, we land in the third stage is called norming. In the norming stage, what was the previous conflict, becomes lessons and is in a more balanced state. Instead of arguing over their differences and power, members are more focused on learning how they can work together (Vaida & Şerban, 2021). Team trust and loyalty are developed; set guidelines are established with the discovery of team members' understanding of their individual roles, and their limitations are accepted. This does not mean conflict cannot happen again; however, with more effective management and increased team cohesion, the degree for damage is significantly reduced. Every team with new and returning members will have to go through this development phase to reach a balanced state to learn to work cohesively and achieve their common goals (Vaida & Şerban, 2021).

Stage 4 – Performing

The fourth stage of the teaming process is performing. In the performing stage of the team's life cycle, members are a more unified group with collective visions and goals. Teams that begin to achieve success will experience increased team cohesion (Seck & Helton, 2014). In the performing stage, since this is where roles and goals are assigned and assumed, conflict is understood as something that will still arise. However, the group also understands that when conflict arises, the issues will be negotiated using clear communication, reflecting that they can solve this issue. This was made possible by developing norms and informal norms in the previous stages of the life cycle (Seck & Helton, 2014). In this stage, members are highly collaborative and have learned to embrace each other's strengths for the better of the team. Including new members being wholeheartedly accepted by returning members to the team (Ming, 2021). This stage is typically achieved later in a team's season. Ideally, before a team's postseason, to have the best chance at achieving the team's ultimate goal(s), they have to peak in this performing stage and maintain it for as long as they can to have optimal team development (Gray, 2021).

Stage 5 – Adjourning

Tuckman added a new stage after performing called adjourning. Adjourning was later added because of the need to understand the team transitioning stage (Franz, 2012). This is the end of a team's life cycle; however, some existing team members will remain, while others will move on and leave the team. There are many reasons a member might be leaving the team. For example, leaving members may decide to transfer, graduate, or have health-related issues. Therefore, the team stage cycle begins again at forming once new members are established

(Vaida & Şerban, 2021). This stage is especially important for returning members to a team because they have an opportunity to reflect on the past year's team's ability to work cohesively and learn from it (Hell, 2022).

Summary

New forming teams can experience many challenges with interpersonal relationships between new and returning members to a team. However, there are many other challenges that both the new and existing members might face. For example, teams could feel the pressure to live up to previous team success, or an individual member of the team might feel that they have big shoes to fill from a former member of the team. There could be countless other challenges. It is important to note that every team starts at the forming stage; however, not every team reaches the final stage of a team's life cycle because some teams do not make it out of the storming or norming stage. Only one and every four teams reach and experience the performing stage (Ming, 2021). Although the performing stage is the most desirable stage for a team to be in, they can only try to be in it as long as they can because it is inevitable that new challenges can emerge and cause a shift in stages. "Tuckman's Model of Team Development (TMTD) does not account for the length of time a team may spend in each stage as it is based on the longevity of the team, the tasks that need to be completed, and other outside factors that may cause the team to digress back into a previous stage" (Gray, 2021). Therefore, it is important that a team continues to nurture relationships with their teammates throughout its team's lifecycle to optimize their opportunity to peak in the performing stage for majority of their season.

Chapter 3: Methodology

The purpose of this project was to understand the importance of a team working cohesively on a collegiate athletic level, as well as what it takes for a new team to learn to work cohesively. This study used a qualitative method to approach the participants better and inquire about collecting data sensitive to each participant in natural settings. The data analysis from using this method helped establish patterns and themes straight from the voice of participants (Creswell & Poth, 2018). This qualitative study intended to help new teams work cohesively together each year. Allowing members to reflect on their team's and personal ability to work cohesively as a team, with their teammates each year. As well as gaining an understanding of how they can improve their learning processes to work together as new members join, some remain, and others leave annually. Using the Tuckman Stage of Group Development, members of a team will have a better understanding of a changing team and the stages that the team will need to go through. In fact, we must go through these stages to reach the level of respect, trust, and maturity that allows for a team's performance to exist (Hall, 2015). Team members can learn from their past team's lifecycles and understand that all The Tuckman Stages of Group Development are necessary to go through for the team to learn to work cohesively and achieve their goals (Hell, 2022). In this research study, the leading question to answer was: *How do Virginia Tech softball players each year learn to work cohesively with each other?*

Designing & Planning Interviews

This qualitative study was developed and evaluated through semi-structured interviews to answer the research question. Unlike structured interviews, semi-structured interviews allowed for more open-ended responses because the interviewer posed follow-up questions based on the

interviewee's responses to the original pre-made question (Appendix A). However, this flexibility made it possible to change the order of the questions prepared for the interview (Kallio et al., 2016). In this study, the researcher formulated a few pre-selected questions. Although this study had four sets of questions, the only reason is that some players are from the past, and some are currently on the team. However, all groups were treated as one group.

It is the researcher's job to ensure that the interview questions will help answer the research question. Therefore, multiple experts carefully reviewed the questions to make sure they would help answer the research question. Once the interview questions were approved, the semi-structured interviewing process began; however, permission was needed first. Interview questions were limited to not overwhelm the participants and allow them to answer each question as openly as they liked. This allowed for open conversations to further the discussion beyond the few questions. However, to maintain the reasons for the interview, the interviewer ensured they guided the conversation back to the topic if the discussion got slightly off-topic (Kallio et al., 2016). Open-ended questions with several possible responses required more codes simultaneously. Therefore, it was important for the coder to have knowledge of the subject matter to properly analyze, code, and interpret the interviewee's responses correctly (Campbell et al., 2013). As a qualitative study, the interviewer's job was to make sense of the observational data collected and code it (Franz, 2012). Notes and recorded interviews needed to be transcribed to be further evaluated. The researcher developed and looked for patterns and themes from the "bottom-up" (Creswell & Poth, 2018).

Choosing Participants

Permission to interview the participants and an application was submitted to the Virginia Tech Institutional Review Board (IRB) (Appendix B). Permission from the IRB was received, and participants were then selected. Participants in this study were Virginia Tech women's softball student-athletes. 10 candidates were asked to participate in the study, and all 10 participated and contributed to the study's findings through interviews. Candidates for this study were players who have at least been a part of the Virginia Tech softball team for one full year under the same head coach, Pete D'Amour, between 2018-2023. Some players have played for the old coaching staff; however, the questions were only to be asking for their experience under the current coaching staff and only between the years 2018-2023 to minimize the possibility for bias since being under a different coaching staff was a risk and limitation to the study. All selected participants between 2018-2023 were contacted through email and officially asked to participate in the study by obtaining their written consent to be interviewed (Appendix C). Once participants willing to participate in the study agreed; time was scheduled for their interview. Interviews with participants were no longer than a 30-minute time frame to respect the student-athlete's time constraint.

Conducting Interviews

Interviews took place in a one-on-one fashion via online "Zoom" (Zoom Video Communication), and participants were asked to locate themselves in their most comfortable, distraction-free environment. Interviews were scheduled for 30 minutes per participant. Before interviews officially began, the interviewer asked for the participant's permission to record the meeting for coding and research purposes and ensured the participants that their identity would

be confidential. Some topics were more sensitive to others; therefore, a semi-structured interview through Zoom allowed participants to turn off their cameras if it made them feel more comfortable answering questions (Gray et al., 2020). With this, the semi-structured interviews began, and refined interview questions could be asked. Semi-structured interviews allowed for the interviewee to have the opportunity to answer questions from their own viewpoint and in a direction, they deemed more important (Leavy, 2020). Throughout the interview, the interviewer interpreted and observed the participant's behavior for other signs that could also be important to answering the research question. However, for those that felt more comfortable answering the questions with their camera off, in that case, the researcher was left to further interpret the conversation by noting the participant's tone.

Analyzing Data

All notes and recorded interviews were downloaded and transcribed by "Otter.ai." Otter.ai is designed to take recorded videos from the Zoom interviews and create a transcript from that recorded audio. The transcript produced by Otter.ai was transferred over to Microsoft Word for deeper review by the researcher. The researcher looked to code this data and investigate common themes from all the interviews. The researcher developed and looked for patterns and themes from the "bottom-up" and evaluated both the database and themes before establishing the set of themes (Creswell & Poth, 2018).

Reflexivity Statement

As a former Virginia Tech student-athlete, it has been interesting to research my study related to team cohesion. I found that research on female student-athletes at the collegiate level

was limited, and findings that relate and discuss a team's life cycle with new and returning members each year. The challenges of forming a new team and learning to work cohesively are not discussed enough and can be a useful tool to understand when forming a new team each year. While conducting my research, I found that teams can face many challenges when forming a team and how important it is to try to develop early in the teaming process.

Researchers have called out many challenges a team can face; however, there is not always a one size fits all solution to every problem. Players can face the same challenges every year but learn to handle them differently based on their teammates and the relationships they may or may not have built. Knowing that different teams can face and handle the same challenges differently—highlights the importance of team development. Understanding The Tuckman Stages of Group Development helps teams navigate and understand a team's life cycle and why they are facing these challenges (Gray, 2021). A team that understands their team's life cycle can help guide future teams into healthy team cohesiveness habits sooner based on what they learned about themselves and the team from the previous year's team life cycles.

New and returning student-athletes are all away from home and spend a lot of time with their teammates. Therefore, the environment they are in most of the day must be valued. Additionally, it is time for team cohesion to be valued, appreciated, and something we strive for early in every teaming process instead of just hoping we gain it eventually without any discussion of team goals, roles, and expectations.

Chapter 4: Findings

The purpose of this project was to understand the importance of a team working cohesively on a collegiate athletic level, as well as what it takes for a new team to learn to work cohesively. This study intended to help new teams work cohesively together each year. The posed the question: *How do Virginia Tech softball players each year learn to work cohesively with each other?*

To answer this question, a series of semi-structured interviews were conducted among Virginia Tech softball student-athletes. The participants in this project are either current or former members of the team and have been a part of the program between the years 2018-2023. All interviewees were asked questions separately to get their personal experiences and opinions on the team's ability to learn to work cohesively. This study has four sets of pre-selected questions since some players are from the past and some are currently on the team. While all groups were treated as one group, there were overlapping themes between all different groups of interviewees. The three themes that emerged from the interviews were:

1. Meeting High Standards with an Evolving Culture & Leadership
2. Developing Relationships Effects On & Off the Field Performance
3. Facing Challenges with Roles & Adversity

The semi-structured interviews allowed the pre-selected questions to be a helping guide to engaging and meaningful conversations. The interviewees were free to make their own interpretation of the questions and answer them how they wanted to base on their unique experiences. All student-athletes contributing to the study will remain anonymous. Therefore, the participants will be given pseudonyms for their privacy and to maintain authenticity of the study.

Theme 1: Meeting High Standards with an Evolving Culture & Leadership

The participants were asked for their opinion on what team cohesion means to them and how differently team cohesion can look on and off the field. This allowed the interviewer to draw conclusions from the interviewee's answers and grasp what the team is like when they are forming a new team each year.

When understanding where this team high standards and evolving culture comes from, Hallie, a student-athlete with a bad first-year experience, told the interviewer how that one bad year inspired a more consistent change with holding teammates to a higher standard and continuous evolving culture when a new team forms each year:

My first year here, we had different coaches. Moreover, our culture was different. As freshmen, many of us struggled just because people in leadership roles above us maybe didn't create a cohesive environment. Thus, in my sophomore year, we got new coaches, and our culture changed...my teammates and I saw an opportunity to develop a new culture and an environment we wanted to come to every day. We became more cohesive and began to work together off the field and get to know each other off the field, which showed in our on-field product. Nevertheless, as I was here longer, I developed into a more leadership role that aimed to establish cohesion, create a culture, and ensure that new people knew our culture.

Many players shared similar feelings as Hallie on having a unified feeling of responsibility to hold themselves to a higher standard and make the newcomers feel welcome and a part of the team. Gaby gives us her thoughts on this feeling of responsibility and how it changed over her time with the program:

You feel responsible for ensuring people feel welcome and know what our program is about when they come in. You learn more about the people around you, and the more time you spend with them, the more responsibility you take to ensure that culture is conveyed with new people coming in so that we would continue to be cohesive.

Another teammate, Katie, confirms this theme and adds to how this team continues to work on their team's cohesion through leadership and how that relays to the new teammates each year:

The senior leadership and seniority help establish the culture when the team changes every year... Many people who have been around a while know what's expected. Traditionally, we have been a cohesive group and gotten along well. So, that just translates when new people come in because they see the cohesion among people who have already been here and figure out what it takes to become part of that culture.

While leadership and seniority have impacted this team's culture, a returning member, Danielle, discusses how leadership understands the impact that new team members have on the team's cohesion and how leadership helps newcomers' transition and maintain the type of culture the team values:

Leadership... telling them - this is right, and this is wrong... not getting on them by telling them; you need to do or be like this. Leadership on the team has to understand that they will need to give newcomers a transition period... realizing that we're a team and we were new too at one point. Therefore, I think that's our biggest thing to ensure freshmen understand.

Leadership and returning members take much responsibility for protecting a healthy environment for players to come every day and every year. Returning players hold those high

expectations for themselves and their teammates. A returning member, Lilly talks about the way she has acted if she sees a newcomer struggling with the transition and why that is important for her to do:

“Something I’ve taken from the past years is that when I see a freshman struggling, I try to take them under my wing...because I had a senior, do that to me and helped my transition.”

The leadership from return members does not go unnoticed. Freshman newcomer: Harper explains her experience with joining the team from the first day she stepped on campus:

“As a freshman, I was worried about the culture... but since the first day on campus, everyone was welcoming and helped me transition through my first year. I hope I can do the same for the freshman next year.”

During the interviews, the student-athletes were then asked about their role on the team and as a teammate. A player’s understanding of their role, how they learn their role, and how they were viewed by their teammates influenced their team’s cohesion. Riley added that being comfortable with her teammates and position on the team as she gained experience over her time with the program allowed her to move into a leadership role on her team:

“I’m more comfortable this year and my role on the team...having more experience being around my teammates, I started to take on some leadership myself and accepted that I am that older girl and I have those experiences.”

Therefore, new members with different personalities gain more comfort with their teammates and start taking on a leadership role as they gain experience with the team; different leadership styles emerge each year. Even if the two people believe in passing on the same standards and healthy culture for their team, the message can come off and be conveyed by

others differently. Brooklyn talks in the interview about what it is like on the team when different leaders emerge and how they choose to communicate with their teammates:

We've had the dictator leadership, and the democracy ...when we have the dictator, what they say goes; and when we have the democracy, they will actually go and ask the team, ... this is going to be a team decision, not this is the law like in the dictatorship.

Theme 2: Developing Relationships Effects On & Off the Field Performance

To further the interview with the athletes. The athletes were asked to discuss their personal relationships with their teammates and how they learned to communicate with them — gaining insight into the importance of the following theme, developing relationships effects on and off the field performance.

Autumn explains the importance of accepting new members on the team fully because they wear the same jersey when they step foot on campus. Therefore, returning members understand or will need to understand the importance of building relationships with their teammates, affecting the team's ability to work as a cohesive group:

We all work hard to get to know one another and make them feel welcome because we won't work collectively well as a group if that doesn't happen. So, it is important to be accepting of the new people because our coaches are deciding who's coming in, not us. We don't know if we'll have a good relationship with them, but regardless they are part of the team when they get here. We can show them better than or the same as what we've gotten from our teammates in previous years.

Gaby explains how the team starts and maintains the developing relationships in the fall by spending lots of time together and talking with a third party, helping them understand the impact it will have on their ability to work together in the spring:

We see each other every day for most of the day, ... that has a lot to do with how we can quickly develop relationships with our teammates. In the fall, we usually spend weekends outside the softball setting and meet with Dr. B [the team's sports psychologist] weekly. During our Dr. B meetings, we do team bonding activities to help build a good foundation for the spring season...when a team is close off the field, they're going to play together and more cohesively on the field...those relationships built in the fall have a big impact on the spring season.

Another teammate, Harper, confirmed the value of developing relationships starting in the fall. However, explaining that although this is a time when new teammates are first meeting and getting to know one another, this is also a time where problems can occur while learning different personalities:

The fall helps establish those relationships. Different problems occur in the spring just because it is in season; you're together much more when roles are established on the field. The problems presented are different in the fall; most of the tiffs and issues occur because we are getting to know one another and learning different personalities while learning how to be one cohesive group.

Danielle labels the fall as one of the most important periods to develop relationships because it will leak into their spring season and affect how they communicate with one another to work cohesively:

The fall is a defining period for our team as far as whether we will be successful in the spring because that's when we can establish ourselves as one collective group working towards the same goal...when we learn how to communicate with one another, which is much needed in the spring...If you don't have a relationship or a bond outside of softball... it will and has leaked into the game sometimes.

Katie expands on how building relationships affects how teammates communicate with each other. Teammates must learn how to handle and address conflict differently from others with different personalities. The ones who have a better relationship with one another handle communication and conflict troubles differently than teammates who do not have a better relationship:

How you know them off the field is important. There will be people on a team who you are better friends with and know better. Thus, there will be people to approach them better and who can talk to them. An important part of that is the ability to establish relationships, know how people handle conflict, and know how to approach your teammates or who can approach them will be important...it all goes back to just establishing relationships early on.

Having a relationship with others and knowing how to approach your teammates is something found to be very important for this team's success in working cohesively together, especially in the spring. Hallie continues to add how an established relationship can make addressing conflict easier:

When we can establish relationships among ourselves and figure out how to communicate with one another, we can blow things off more... With our ability to get to know one another and create relationships outside of everything, when an issue occurs

with communication, it's easier to solve when we have a background of how that person likes to be communicated with and how to deal with the problem.

Lilly, piles in on the conversations to view how a lack of relationship can cause a conflict to never be resolved, affecting team cohesion:

It's easier to talk to someone you have a relationship with, especially if you have a conflict because you want to fix it with them. However, if I don't have a relationship with them, I don't always feel the need to fix it, affecting our ability to work together fully.

Teammate Riley talks about how she learned to communicate with her teammates and what expectations she has for her teammates when communicating with her:

On the field, it's mostly about trusting your teammates. That comes with listening to them and communicating. It is more about developing the friendship behind it. So...when you're on the field, it's...easy. Most of the work is done off the field by having quality time and honest conversations with each other about how you are as a teammate and if something needs to be addressed... and not talking bad about someone behind their back instead of being upfront and honest with them.

Many teammates share this desire for open and honest relationships with their teammates.

Harper talks about how she thinks they grow closer if they can be emotionally honest:

"Be honest with how we're feeling rather than just sucking it up and rubbing dirt on it.

Having more of those bonds, I feel we've all grown closer by being emotionally honest."

Not being about to be up front and emotionally honest with our teammates, Emily explains, can make matters worse and affect team cohesion:

Addressing things is better. When you let things hang in the background...it makes it a more toxic environment... yes, issues are always going to happen, but having a deeper

and more developed friendship makes it easier to address a conflict because it won't come off as harsh.... we could plan to sit down and talk about how we want to handle everything in a more friendly approach, making it very worthwhile for team cohesion.

Although some situations and some teammates may prefer sit-down conversations, other teammates like Riley may rather respond by making light out of a pressured situation:

Talking to people without softball or pressure allows me to learn different personalities...For example, my way will be different from someone else's of trying to help somebody; I'm going to joke around with you...to help you forget about the situation and the pressure. Others might think getting on their back is best because I know this is good for them. It's knowing different people and that some people need different approaches.

How we communicate with one another can all look different to fit personalities, whether getting on a teammate or telling a quick joke; all jokes aside, Autumn says it is also seen as something bigger than softball:

Many teammates will be your friends for the rest of your life...that perspective comes the longer you're here. When you first get here, softball is everything, and a bad day on the field may seem like the end of the world. But the relationships you establish make you realize it goes way beyond softball.

Theme 3: Facing Challenges with Roles & Adversity

The next stage of the interview asked the athletes to discuss what kind of challenges they faced individually and as a team—alluding to our final theme that affected the team's cohesion, facing challenges with roles and adversity.

Brooklyn explains how being on a team with a bunch of girls is a challenge of its own. Not only are teammates learning to be cohesive with different personalities and new faces, but they also sometimes compete for the same spot, creating more opportunities for miscommunication, conflict, and struggles with team cohesiveness:

There will always be trouble communicating and having issues being on a team with 30 girls. Especially because it's an environment where you compete for playing time to be on the field for the same spot, creating issues with one another...It's difficult, especially when 25 girls are eyeing 10 spots [nine on the field and one designated hitter] ... most people will not be happy.

Having 10 spots for 25 to 30 girls calls for some pressure. Riley, a player that has experienced what it is like being a starter and a bench player, explains that there are many struggles with pressure no matter the position on or off the field:

I've been a starter. I've been a bench player; I've been all of it. I understand what both are going through; it's a lot of pressure from every aspect of this team. As a starter, I worried about keeping my position in the lineup because we traditionally have been a very deep team, so if I had a bad game, my spot could open up. Whereas, when I was on the bench and got a chance to prove myself in a game, I felt pressure to do well to win a spot in the lineup for the next game.

When we face pressure to perform or win a spot in the lineup, Emily dives into how challenges with the ability to accept the role the team needs can affect the team's ability to work cohesively on the field:

One thing that challenges our team cohesion is acceptance of your role. It's easy for the nine people on the field to be cohesive when they know they're going to play; they know

their role. But the people in the dugout must pull in the same direction just as much. That can be hard to accept... However, you will bring the whole team down if you don't accept your role... The people on the field know when the people in the dugout aren't rooting for them; and aren't being good teammates...So, having those relationships established off the field, accepting your role on the field, and not letting that affect your relationships outside.

As mentioned above, Danielle tails the conversation of the starters, knowing when someone is not pulling for them. Explaining how toxic traits and people kill a team's ability to work cohesively regardless of a player's position on the field:

Cancer on the team or someone toxic ruins team cohesion. It can be one player that does it. Teams go farther without them...a toxic person always in your ear on the bench; will bleed into the starter.... if on the field, it will bleed into the entire team.

Another teammate, Riley, has something to say about cancers on the team. Further explaining what a toxic player on the team might look like and how easily rumors get spread, damaging team cohesion:

“A toxic player comes from a lot more jealousy and a lot more of, me, me, me, than what's best for the team. Leading to the blame game where nothing gets resolved. Testing our team cohesion.”

Toxic people are not the only challenges when facing adversity individually and as a team. Sometimes the adversity on the team comes from something totally off the field. Freshmen come in every year, living a new lifestyle, and learning to live with people they did not know. Lilly talks about the adversity that newcomers face, about the newfound freedom that college can bring and how their actions can affect the team. Not all struggles stay at home:

It's the first time they've ever been away from home. They're around all new people for the first time with complete freedom. That's a universal thing when you come to college, but then you add the team aspect. They often don't realize how their actions affect other team members. It's a challenge just as freshmen get settled in and learn to navigate new responsibilities while learning to live closely with others, they don't know yet, but spend much time at practice with. However, we know this happens every fall.

Katie explains how there are no winners in the blame game—stating that the team gets tested again in the spring if a team starts to lose. Deepening the conversation of how losing and not achieving the team's original goals affects a team's ability to work cohesively:

“Losing is going to hurt team cohesion. Not just losing but blaming each other for losing...Good cohesion is coming together. Rather worrying about what the coaches are saying, worry about what we're saying about each other as teammates.”

As a member of a team with many people competing for one of the limited spots on the field, Gaby explains how she dealt with the adversity and pressure of competing with another teammate for one position on the field. Diving into how one teammate's reaction to that adversity can affect the whole team:

When I have a hard time feeling happy for the person in my position, I look to someone that's been through something similar and ask them how they dealt with it. Knowing that if I negatively deal with it and can't accept it, it does affect the whole team.

Hallie discusses how a lot of individual adversity is left to figure out for themselves. However, she also seeks help when looking for trusted, honest advice. Explaining that those honest conversations were necessary for her to be honest with her role and how she could help the team:

I figured it out independently, but sometimes I like to talk to Coach Kelly [the strength and conditioning coach] because she will tell me what I need to do. So, I listen to myself and find people I can talk to and be honest with... Coach Kelly and I had a genuine conversation after one season in the summer, and she was just like, "You were checked out, you weren't there, and you could see it all over your face." I didn't see or feel that; I had no idea how I was coming off to my team. But she's right, coming from an outside view.

Understanding roles on a team can take time and effort. Many teammates like Harper agree that she, too, had to navigate a lot on her own; but faced some adversity when dealing with pride and jealousy issues. However, established relationships earlier on helped her teammates learn to communicate with one another more respectfully:

On a highly competitive team, everyone came from being the best on their travel ball team to now having to fight for a spot with someone that is just as good as you. In the beginning, when there's new faces, there's always a little bit of pride and jealousy. But when you start forming a friendship in the fall, you can be much more honest in the spring...When a friendship develops, you genuinely care for each other and communicate your roles more respectfully.

Katie explains how she faced adversity with the understanding that her role does not always look like what is best for her personally. However, she talks about how learning to accept her role allowed her to add value in different ways than she originally thought herself:

When I first transferred to Virginia Tech, I told myself I would be this, this, and this.

Then I got humbled quickly, and I had to learn my new reality and accept my new role...I later learned that being the teammate someone needed was more valuable than being the

player I thought I had to be to make the team successful. I found another way to give my role meaning and make the team successful.

Freshman, Lilly learns that sometimes understanding a role and facing adversity means redefining success and expectations:

Coming into my freshman year, I set expectations for myself based on what I wanted my role to be. And then, going into this spring, I experienced failure quickly, and then all of what I planned for myself went out the window. Coach Mike had to step in when he noticed I needed to change some things, and we worked together through that.

Hallie adds that upperclassmen understand what it is like to not become the role that players always expected of themselves as freshmen. Therefore, she explains how important it is to show the newcomers that being a good teammate can just as important as a role on the starting lineup:

Sometimes freshmen are first-year starters, but only a few spots are available when they first come in. So only some people get on the field. As a freshman, it can be hard to accept your role and, for some, not know how to handle not getting the role you saw for yourself. The upperclassmen have been there; therefore...upperclassmen teach them how to be good teammates and ensure that they're still pulling in the same direction as the rest of the team, even if they aren't on the field. Upperclassman can show them other ways to benefit the team.

Returning Member Riley explains how returning members help their new and existing teammates learn to be a cohesively unit just by accepting their role and leading by example:

Whether we like them or not, they are part of the team when they get here. So, the team dynamic does change every year, but having people coming back who know how the

team works, and show how they can accept their roles, helps newcomers learn to become part of our cohesive unit.

Discussion

This project evaluated how Virginia Tech Softball players learned to work cohesively each year—allowing members to reflect on their team’s and personal ability to work cohesively as a team and with their teammates each year. As well as gaining an understanding of how they can improve their learning processes to work together as new members join, some remain, and others leave annually. Using the Tuckman Stage of Group Development (forming, storming, norming, performing, adjourning), team members will have a better understanding of a changing team and the stages that the team will need to go through to learn to work cohesively each year to achieve their goals (Hell, 2022). The following themes used in this project align with the Tuckman Stages of Group Development:

1. Meeting High Standards with an Evolving Culture & Leadership
2. Developing Relationships Effects On & Off the Field Performance
3. Facing Challenges with Roles & Adversity

Theme 1 – Meeting High Standards with an Evolving Culture & Leadership

The first theme describes what it is like when the team first gets together, which is related to the first stage of Tuckman Stages of Group Development, forming. When members first join a team, new members learn to navigate norms, roles, and expectations by watching and socially interacting with returning members with more experience (Burt et al., 2022). Every team member mentioned the importance of how this forming stage affects their team cohesion. Some

members interviewed addressed how valuable it was to them to make their teammates feel welcome because, in the past, they were part of a team that lacked the ability to work cohesively, leading that team to never get out of the storming stage (Vaida & Şerban, 2021). Making them realize that they need to learn how to get out of the storming stage by changing the culture for the years to come. The start of the second stage of the Tuckman model, storming, is a stage where individuals feel and express emotional responses to one another, leading to conflict (Hall, 2015). Regardless of anyone's past team cohesion, all returning members felt that it was their responsibility to help newcomers navigate what the culture was through putting in the effort to make them feel welcome each year. New team members felt this culture from the examples the upperclassmen left them and confirmed it is something they will value and hope to pass on for the years to come.

This comes from the upperclassman understanding their roles and how leaders emerged. When asked how they learned their role on the team each year, one response was “the more time you spend with them [teammates], the more responsibility you take to ensure that culture was conveyed with new people coming in.” This assumed leadership roles were gained with more experience with the team; however, this changed each year. Therefore, with new members claiming more responsibility and leadership comes different leadership styles annually. Innate struggles for leadership roles can cause a team to move from the forming stage into the storming stage (Vaida & Şerban, 2021). A team in the forming stage has more experienced team members who grow comfortable with their position on the team and begin to make their opinions known. Like returning members, newcomers also start seeing things through their own individual lenses. Bring to light the start of the storming stage when differences in one another's personalities and leadership styles affect the team's ability to work cohesively (Hall et al., 2019).

Theme 2 – Developing Relationships Effects On & Off the Field Performance

In interviews, this theme claims that a team that wants to be successful must learn to accept their teammates. From the first day on campus, teammates interact and start forming relationships, per the Tuckman model forming stage. This team formed relationships through social interactions and a third party. Typically, a Virginia Tech softball team player will consider a person affiliated with the program to be a third-party member. To name a few third-party examples mentioned in the study, the sports psychologist, the team's physical trainer, and the strength trainer. Weekly the players would have Dr. B meetings that allowed them to see each other's differences and begin understanding their teammates by bonding through similarities and finding differences outside of softball. The team in the storming stage experienced challenges early in the fall, as could be expected since differences are now highlighted—a common theme explained by participants as something that will happen every year. Therefore, for a team to learn to balance each other's differences and prior expectations, they had to learn how to communicate with their teammates by valuing building meaningful relationships sooner and using the relationships they developed early on to battle through the storming stage (Hell, 2022). Relationships affect this team greatly. Many participants explained how having a relationship or lack of a relationship with another teammate was a big factor in how they addressed conflict with another teammate. Members explained how a lack of a relationship with a teammate made them not want to resolve conflict—even though the same members explained how it takes only one member to affect team cohesion. Therefore, if a teammate does not want to resolve conflict, they can keep the team from entering the norming stage.

Players on the team further expressed the importance of developing relationships to allow for more honest conversations when bumps in the road cause conflict. Developing relationships

carries weight in how this team learns to communicate conflict. This ability to learn how to approach another teammate about conflict off the field carries over on the field in the spring—concluding that they feel that building relationships on the team is bigger than softball. “Conflict in and of itself is not a problem. It is the management of conflict that can be tricky (Hall, et al., 2019).”

Theme 3 – Facing Challenges with Roles & Adversity

All the players in the interview faced adversity that affected their team cohesion. One moving adversity that all participants mentioned was being on a team with 30 girls with different personalities and expectations. The players discussed while being very welcoming and feeling welcomed is very important to this team; it is not always welcoming when it comes to competing for a spot on the field. On a highly competitive team, there is much competition among players, who may have always been "starters" their whole life. Therefore, the players reached a storming phase and explained that this was difficult for them and their teammates because it was their first time facing that kind of adversity. Explaining that when there are only 10 spots for 30 girls, something does not add up; not everyone will be happy. However, one of the players mentioned how pressure is pressure—expressing how she felt pressure to maintain her spot when she was in the lineup and felt a different kind of pressure to get in the lineup when she was not.

Many players shared the struggles they individually faced when needing to accept their roles and be good teammates, even if they were not happy with their roles. Many explained that their storming phase comes from cancers, pride, jealousy, rumors spreading, not meeting expectations, and the blame game for losing were the biggest factors that negatively affected the team's ability to work cohesively. Further explaining how struggles to accept a role can cause a

toxic environment that bleeds into the starters and affects the team's ability to perform and work cohesively.

Several players could explain how they worked through the storming stage by looking in the mirror and considering how they might have affected the team's cohesiveness. As a team learns and grows with one another, the team starts to pull in the same direction; the team begins entering the norming stage of the Tuckman model. Addressing how sometimes they had to ask a third party how to be better teammates and accept their role so the team could enter the norming and performing stage (Hell, 2022). Players explained how if they could all accept their roles and learn to be good teammates, they would be able to pull in the same direction. New sensitivity and understanding of one another can form, allowing them to work towards common goals while reaching the norming stage, hoping to reach the performing stage of the Tuckman model by or during the spring season (Hall et al., 2019).

Chapter 5: Conclusion

The leading question for this project was: *How do Virginia Tech softball players each year learn to work cohesively with each other?*

The purpose of this project was to understand the importance of a team working cohesively on a collegiate athletic level, as well as what it takes for a new team to learn to work cohesively. This study intended to help new teams work cohesively together each year. The contributing members, providing insight, were chosen to provide a range of different statuses and years of experience. Upon further evaluation of the interviews, how the team learned to work cohesively played a heavy role. Players learned to communicate through developing relationships earlier on and understand their roles while feeling the pressure of external and internal adversities. Ultimately allowing them to understand that facing their adversities can make them grow as a teammate and team—holding themselves and their teammates to a higher standard to continue to maintain a healthy culture for years, even with a changing team every year.

The Tuckman Group Development Model developed by Bruce Tuckman “introduced a framework for understanding the evolution of a team, which including forming (coming together around a shared interest), storming (becoming aware of and managing difference), norming (developing group norms for working together), and performing (achieving the state of successful team functions)” (Hall et al., 2019, p. 606), later adding a final stage, adjourning (the period at the end of a team’s lifecycle). This model helps a team understand the stages necessary in a team’s lifecycle. A team wanting to work cohesively will need to understand the stages a team goes through to help them understand how they learn to work cohesively and how they can use that learning to better themselves and the team cohesively each year.

This study's findings confirm the answer to the research question. Like every college team in the NCAA, teams like Virginia Tech's softball program will be ever-changing in their team dynamics, leadership, cohesiveness, and so on. The team must form and maintain relationships every year, while new leaders come to light. Leadership emerges through assumptions and gained experience with the program. Leaders on this team tend to be the core group that sets the standards and tone for everyone else. Therefore, they assume the responsibility of making everyone feel welcome and teaching newcomers how to be good teammates. This core group's understanding of setting a good example for their teammates is essential because if it is negative, they will not have a chance in the spring, and it could make it hard to recover because it can roll into future years to come. Therefore, this team values being welcoming early on and tries to develop meaningful relationships outside of softball. It allows them to learn how to approach their teammates when conflict arises, leading them to work cohesively on and off the field better.

Recommendations

Developing Relationships Sooner

The ability to develop relationships has been proven through this study to have a massive impact on the team's ability to work cohesively. If a teammate can develop a meaningful relationship with another, they will be able to resolve conflicts when something does come up. Therefore, relationships help to instill trust and better communication skills that allow for more open and honest conversations. However, conflicts may never get resolved without it, affecting the entire team. Developing relationships sooner allows new possibilities from different perspectives, opening their minds to be more self-aware of putting their teammate's needs before

their own. Finding a third party is another way to help a team and an individual become self-aware. Having a trusted third party not only helps teammates learn to fight fairly but also can be there to help us learn about ourselves and others. A third party can be the voice of reason for many individuals in almost every scenario. Regardless of having a third party or not, relationships must be built so they can know them as humans before knowing them as teammates. Relationships with their teammates will be bigger than the game of softball.

Communicating Red Lights & Green Lights

Knowing how to communicate with a teammate and do it in a way they respond well requires understanding different personalities and knowing their red and green lights. Red lights for a player are a time when they are at a low point. Often only certain people can talk to them. Knowing who those people are and knowing when to appoint those people, if necessary, will be important. Green lights are when a player is at a high point and can be the most approachable. Therefore, knowing our red and green lights helps teammates learn to communicate with one another and helps to face conflict more fairly.

Learn How to Face Adversity

For many highly competitive teams, facing adversity is sometimes discussed when it is too late. Yes, we are all aware that facing adversity will happen; however, we often miss the conversation on how to respond when failure and adversity hits. For example, when the team experienced it resorted to pointing fingers rather than accepting that things will not always go as planned and not all goals get reached. The purpose is not to think of all the negative but rather see all the highs and lows as a part of the journey equally. That way, a team can be better

prepared for difficult moments rather than seeing difficult moments as defining moments.

Helping individuals and teams redefine success and be better prepared for difficult moments.

That way facing adversity does not seem negatively magnified when looking at it affects team cohesion.

Future Considerations

Future researchers interested in how teams work cohesively can expand the understanding of how to better prepare athletes for failure and facing adversity. An athlete's lack of preparation in facing adversity and failure can impact a team's ability to work cohesively, affecting how they build relationships and communicate with their teammates and themselves. An additional study for interested researchers about team cohesion is to investigate the effects that coaches have on their player's team dynamics and the role they play in team cohesion.

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Appendices

Appendix A: Interview Questions

Research Question: How do Virginia Tech softball players each year learn to work cohesively with each other?

Pre-Interview:

Receive verbal consent from the participant(s) to be interviewed and to be recorded

Remind the participant(s) that their identity will not be released, and their responds will remain anonymous

New Members (<1year)

1. How long have you been with the Virginia Tech softball program?
2. What does “team cohesion” mean to you?
 - a. How might team cohesion look differently on and off the field?
3. What sets a team with good team cohesion apart from a team with poor team cohesion?
 - a. In your opinion what is the biggest factor that affects (or has affected) the softball program’s team cohesion?
4. Were there any challenges among team members that affected team cohesion? If so, what kind of challenges were faced among team members?
 - a. How were these challenges addressed?
 - b. Were they worked through? If so, how did you or others respond to these challenges?
5. How are goals communicated or negotiated by team members?
 - a. How do your teammates communicate your role on the team?

6. What do you perceive to be your role on the team? How did you navigate your understanding of your role on the team?
 - a. Are there any challenges with the communication of roles on the team between teammates? If so, what are they?
 - b. How might that change as the team's season goes forward?
 - c. How might this affect team cohesion?
7. How was your experience with your teammates when you first joined the team?
 - a. How does this compare to your expectations with teammate relationships?
8. How does your relationships change with your teammates as the season went on?
9. Is there anything you value, or wish was different about your first years' experience with your teammates on team cohesion?
 - a. What would you like to see differently?
 - b. What do you think you will try to bring to the future teams?
10. Is there anything else you would like to share that you feel is important about team cohesion that I haven't already asked you?

Returning Members (>1 year)

1. How long have you been with the Virginia Tech softball program?
2. What does "team cohesion" mean to you?
 - a. How might team cohesion look differently on and off the field?
3. What sets a team with good team cohesion apart from a team with poor team cohesion?
 - a. In your opinion what is the biggest factor that affects (or has affected) the softball program's team cohesion?

11. Since you have been a part of the program for multiple seasons, how are goals communicated or negotiated by team members differently?
 - b. How are you communicated your role on the team by your teammates over the years?
4. How has your perception of your role on the team changed over the years?
5. How did you navigate your understanding of your role on the team each year?
 - a. Are there any challenges with the communication of roles on the team between teammates? If so, what is are they?
 - i. How are these challenges the same or similar to the previous year's challenges?
 - b. How might that change as the team's season goes forward?
 - c. How might this affect team cohesion?
6. How was your experience with your teammates when a new team forms each year?
 - a. How has new members joining the team affect team cohesion?
7. Are there any challenges with new members joining the team? If so, please give an example(s).
 - a. How are these challenges the same or similar to the previous year's challenges?
 - b. How are these challenges addressed?
 - c. Were they worked through? If so, how did you or others respond to these challenges?
8. Have your relationships changed with your teammates as the season went on?
9. Is there anything you value, or wish was different about a past team's cohesion that you took or plan to take into another team?

- a. What is something you took or will take from a past season's team cohesion?
 - b. What is something you changed or will change from a past season's team cohesion?
10. Is there anything else you would like to share that you feel is important about team cohesion that I haven't already asked you?

Leaving Members (*Final-Year of Eligibility – Graduating*)

1. How long have you been with the Virginia Tech softball program?
2. What does "team cohesion" mean to you?
 - a. How might team cohesion look differently on and off the field?
3. What sets a team with good team cohesion apart from a team with poor team cohesion?
4. Since you have been a part of the program for multiple seasons, how are goals communicated or negotiated by team members differently?
 - a. How are you communicated your role on the team by your teammates over the years?
5. How has your perception of your role on the team changed over the years? How did you navigate your understanding of your role on the team each year?
6. Are there any challenges with the communication of roles on the team between teammates? If so, can you please give me an example of a time where there was challenge with the communication of roles on the team.
 - a. How did that affect the team's cohesion?
 - b. How are these challenges the same or similar to the previous year's challenges?
 - c. How might that change as the team's season goes forward?

7. How was your experience with your teammates when a new team forms each year?
 - a. How does new members joining the team affect team cohesion?
8. Are there any challenges with new members joining the team? If so, what please give me some examples.
 - a. How are these challenges the same or similar to the previous year's challenges?
 - b. How are these challenges addressed?
 - c. Were they worked through? If so, how did you or others respond to these challenges?
9. Have your relationships changed with your teammates as the season went on?
10. Is there anything you value, or wish was different about a past team's cohesion that you took into another team?
 - a. What is something you took from a past season's team cohesion?
 - b. What is something you changed from a past season's team cohesion?
11. Being in your final year of eligibility, what would you say was the most challenging thing that affected your team cohesion?
12. Is there anything else you would like to share that you feel is important about team cohesion that I haven't already asked you?


Former Members (*Transfers, Quit, or Graduated*)

1. How long were you with the Virginia Tech softball program?
2. What does "team cohesion" mean to you?
 - a. How might team cohesion look differently on and off the field?
3. What sets a team with good team cohesion apart from a team with poor team cohesion?

4. Since you have been a part of the program for multiple seasons, how are goals communicated or negotiated by team members differently?
 - a. How were you communicated your role on the team by your teammates over the years?
5. How did your perception of your role on the team changed over the years? How did you navigate your understanding of your role on the team each year?
6. Were there any challenges with the communication of roles on the team between teammates? Please explain, if so.
 - a. How are these challenges the same or similar to the previous year's challenges?
 - b. How did that change as the team's season goes forward?
 - c. How did this affect team cohesion?
7. How was your experience with your teammates when a new team forms each year?
 - a. How do new members joining the team affect team cohesion?
8. Were there any challenges with new members joining the team? If so, please give me some examples.
 - a. How are these challenges the same or similar to the previous year's challenges?
 - b. How are these challenges addressed?
 - c. Were they worked through? If so, how did you or others respond to these challenges?
9. Were there any challenges with new members joining the team?
 - a. How are these challenges the same or similar to the previous year's challenges?
 - b. How might that change as the team's season goes forward?
 - c. How might this affect team cohesion?

10. How did your relationships change with your teammates as the season went on?
11. Is there anything you value, or wish was different about a past team's cohesion that you took into another team?
 - a. What is something you took from a past season's team cohesion?
 - b. What is something you changed from a past season's team cohesion?
12. Having completed your years of eligibility with this program, what would you say was the most challenging thing that affected your team cohesion?
13. Is there anything else you would like to share that you feel is important about team cohesion that I haven't already asked you?

Appendix B: IRB Approval Letter



**Division of Scholarly Integrity and
Research Compliance**
Institutional Review Board
North End Center, Suite 4120 (MC 0497)
300 Turner Street NW
Blacksburg, Virginia 24061
540/231-3732
irb@vt.edu
<http://www.research.vt.edu/sirc/hrpp>

MEMORANDUM

DATE: April 11, 2023

TO: Richard James Rateau

FROM: Virginia Tech Institutional Review Board (FWA00000572)

PROTOCOL TITLE: The Effect of New Players on Team Cohesion

IRB NUMBER: 23-404

Based on the submitted project description and items listed in the Special Instructions section found on Page 2, the Virginia Tech Human Research Protection Program (HRPP) has determined that the proposed activity is not research involving human subjects as defined by HHS and FDA regulations.

Further review and approval by the Virginia Tech Human Research Protection Program (HRPP) is not required because this is not human research. This determination applies only to the activities described in the submitted project description and does not apply should any changes be made. If changes are made you must immediately submit an Amendment to the HRPP for a new determination. Your amendment must include a description of the changes and you must upload all revised documents. At that time, the HRPP will review the submission activities to confirm the original "Not Research" decision or to advise if a new application must be made.

If there are additional undisclosed components that you feel merit a change in this initial determination, please contact our office for a consultation.

Please be aware that receiving a "Not Research" Determination is not the same as IRB review and approval of the activity. You are NOT to use IRB consent forms or templates for these activities. If you have any questions, please contact the Virginia Tech HRPP office at 540-231-3732 or irb@vt.edu.

PROTOCOL INFORMATION:

Determined As: **Not Research**
Protocol Determination Date: **April 11, 2023**

ASSOCIATED FUNDING:

The table on the following page indicates whether grant proposals are related to this protocol, and which of the listed proposals, if any, have been compared to this protocol, if required.

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Appendix C: Participant Written Consent Form

Hello _____, I am Darby and I played softball for VT for the last 5 years, and I am currently working towards the completion of my master's degree, and I will be conducting my project and report on the effect of new players on team cohesion.

I am currently working towards completing my master's degree in leadership studies. To complete my project, I am conducting a project involving the Virginia Tech Softball Program and the student-athletes a part of this program. My project will explore how Virginia Tech softball players learn to work cohesively each year. My goal is to help future teams of the softball program to reflect on their team's and personal ability to work cohesively as a team and with their teammates each year. As well as help them understand how they learn to work cohesively each year.

I will be contacting members from the softball program between the years 2018-2023 and ask them to participate in my brief, recorded interview to gather the necessary data to answer my research question for my final project.

Since you are a candidate for my study, I wanted to formally invite you to participate in an interview based on this topic. Interviews will be no longer than 30 minutes. All participant's responses will remain anonymous to the study and will not be identified by name or status in the final project.

Your participation in the interview is completely voluntary, and you are not required to contribute to the project. If you do plan to participate, you will not be compensated for assisting.

Please respond to me via email (darbyt3@vt.edu) to confirm your interest in participating and help further my project. Please respond no later than (4 days after sending).

Hope to hear from you soon.

Thank you!