Journal of Coaching Education

Editor's Note

This is first manuscript for the Journal of Coaching Education "From the Field" format. This new format provides an avenue for researchers who want to emphasize the application of their research, or expert level coaches who are willing to share their best practices from an action research perspective. The JCE is especially interested in demonstrating how action research and formal evaluation contributes to the art and science of coaching. While authors have been encouraged to provide a few examples to illustrate their discussion of the topic, we encourage readers to initiate a direct dialogue with the researchers and coaches for greater understanding and application to their specific sport setting. We hope that you will let us know what you think about our new manuscript format and will consider submitting a manuscript to share with this electronic learning community.

The Concepts of Clutch and Choking: Recommendations for Improving Performance under Pressure

Chad Seifried, Ph.D.
Louisiana State University

Matthew Papatheodorou, M.A.
All Points Connect, Cleveland, OH

Abstract

The main purpose of this article is to provide suggestions to coaches on how they can assist young athletes in pressure packed situations to realize an ideal performance state. Suggestions provided address controlling emotions, adopting coping methods, practicing under game situations, embracing physical routines along with mental rehearsals, and engaging in self reflection/challenges. The strategies and discussions below should appear as vital for coaches attempting to help assist a young person's future mental and emotional development. Furthermore, it should educate coaches and potentially others (e.g., spectators and media) on how to better handle these situations or instances so they can avoid the production of negative consequences on the lives of young people (e.g., choking label, social anxiety, poor self-esteem or image).

A publication from the National Association for Sport and Physical Education (NASPE), an association in the American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD)
1900 Association Drive • Reston, Virginia • 20191 • www.NASPEinfo.org • 703.476.3410
©2010 by NASPE. All Rights Reserved.

Unauthenticated | Downloaded 08/10/20 05:03 PM UTC

Journal of Coaching Education

The Concepts of Clutch and Choking: Recommendations for Improving Performance under Pressure

Student Performance under Pressure

Three seconds remain on a ticking clock. Tim receives a pass from his teammate and charges toward the basket. The whistle blows as Tim is knocked to the floor. Tim must go to the free-throw line for a pair of shots with his team trailing by one point against archrival Central and a district title on the line. With the help of a teammate, Tim gathers himself and gets back to his feet. He takes a slow walk toward the free-throw line, shoulders hunched, no grin to be found. Tim has shot free throws thousands of times with great success. Many wonder will he now when the game, season, and his high school career are on the line.

As Tim toes the line for the location of his lead foot, the intensity of the situation begins to set in. Tim must find the proper balance but begins to breathe very hard, as not only the wear and tear of the game has taken its toll, but also the simple reality he faces. Tim sees he must either knock down at least one free-throw or face the fact he failed to extend his team's season. His heart begins to race a bit more as he takes his usual three dribbles. His hands perspire a bit more than usual as he lifts the now wet ball toward the shooting position. Tim loses his grasp of the ball as it slides unusually within his hands. His face begins to contort, showing little confidence and much anxiety. This is clear to all those who watch. As he pauses to prepare for the shot, Tim's attention wanders as he thinks his legs feel a bit heavier than normal. Uncomfortably, Tim hoists the shot toward the rim. The ball barely touches the front of the iron.

Tim thinks about the slippery ball, wipes his hands on his shorts and suggests to himself, "Bend your legs." As the official interjects there is "one shot remaining" Tim suddenly realizes the pressure is on and negatively he thinks about nothing other than the obvious, his career and his team's season possibly ending with this shot. Once he receives the ball from the official, he attempts to gather himself but only pounds the ball into the floor once. All those who know his routine see this and cringe while others in the crowd yell, taunt, and encourage Tim to miss. Tim's heart races even faster, and to his dismay, his palms sweat even more. As he prepares to shoot the ball, his entire career seemingly flashes through his mind. Again, Tim bends his legs but he begins to push the ball more with his arms to compensate for his previous shot falling short. His sweaty hands prompt Tim's elbow to extend outward instead of remaining tucked under the ball in an attempt to reestablish a better grip. Tim's release point is far too early and he loses all semblance of the form he worked so hard on for years to develop. The ball clanks off the back iron and bounces off two players fighting for the ball. The buzzer sounds. The game is over along with Tim's season and career. Many spectators in the crowd suggest Tim choked. Those thoughts are reinforced and supported by the game's various media outlets, like the local late night sports report, the next day's newspaper, blogs, and talk radio shows. The unfortunate legacy of a choker begins for Tim.

The main purpose of this article is to provide suggestions to coaches on how they can assist young athletes in pressure packed situations to realize an ideal performance state. These strategies and discussions should appear

A publication from the National Association for Sport and Physical Education (NASPE), an association in the American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD)
1900 Association Drive • Reston, Virginia • 20191 • www.NASPEinfo.org • 703.476.3410
©2010 by NASPE. All Rights Reserved.

Unauthenticated | Downloaded 08/10/20 05:03 PM UTC

as vital for coaches attempting to help a young person's future mental and emotional development. Specifically, this article should educate coaches and players on how to better handle high-pressure situations or instances through using the appropriate coping mechanism. Furthermore, it aims to discourage or warn about the use of the choking label through publication, yelling, or taunting by the various media outlets and spectators so they can avoid the production of negative consequences on the lives of young people (e.g., social anxiety, poor self-esteem/image). To help coaches and players better identify choking and clutch performances, those terms will also be briefly defined.

The following information and perspective is not intended to be seen as an ultimate solution but as a reflection on emerging tactics becoming more established by successful athletic programs, national/sport governing bodies (e.g., National Interscholastic Athletic Administrators Association-NIAAA, National Association of Basketball Coaches-NABC) and coaching education organizations (e.g., Positive Coaching Alliance). The authors possess a combined 14-plus years of successful basketball coaching and management experience at the high school, college, and professional levels along with membership in the NABC, NIAAA, NASSM, and NASSH for several years. Dr. Seifried coached basketball at the college (Division I) and high school level (Division I Ohio and AAAA Pennsylvania) since 1999 where he was part of six district championships and one state championship. Prior to 1999, he was a member of the Penn State men's basketball program under Jerry Dunn where he also served as an administrative assistant during the 2001-2002 season. Dr. Seifried also presented and published several articles on coaching related-topics. Matthew Papatheodorou graduated from The Ohio State University in 2008 with a master's degree in sport management and has interned with the Ohio High School Athletic Association (2007-2008), worked for the Philadelphia 76ers (2008) in basketball operations, and currently works for the Cleveland Cavaliers.

Choking and Clutch

The terms "choking" and "clutch" are colloquial terms used to describe the performance of individuals and teams who unexpectedly perform poorly or superbly in vital situations due to a pressure from some source. The researchers argue "clutch" exists as a challenging concept which is inadequately defined in sport, because much of the literature addressing the idea of clutch centers simply on the existence of clutch performers (Albert & Bennett, 2001; Birnbaum, 2005; Cramer, 1977; James, 2004; Silver, 2006). For this article, the researchers define clutch as when confidence, talent, skill, and preparation combine to produce a winning performance during important events/contests or during moments of great significance (i.e., situations more pivotal to determining who wins the game). Readers of this work may wonder how we can identify the "pivotal" or "pressure" situations of games but this can be approximated adequately if we base our decision on one simple axiom: You play to win the game. Thus, if we stop the contest right before a specific moment (e.g., free throw attempt or putt), we should notice how important these situations are toward the event outcome.

Many scholars proposed choking emerges when individuals or groups fail to concentrate on task-relevant information, processes, or cues (Baumeister, 1984; Beilock & Carr, 2001; Lewis & Linder, 1997; Weinberg & Gould, 2007). Other work on choking suggests it occurs for a variety of reasons. For example, the notion of

A publication from the National Association for Sport and Physical Education (NASPE), an association in the American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD)
1900 Association Drive • Reston, Virginia • 20191 • www.NASPEinfo.org • 703.476.3410
©2010 by NASPE. All Rights Reserved.

Unauthenticated | Downloaded 08/10/20 05:03 PM UTC

physiological change, distraction, and self-focus, which over motivation likely produces and/or embraces, explains there is an optimal motivational or emotional level one can reach to achieve their best performance but a drive exceeding that point will produce progressively or catastrophically more negative results (Hardy, 1996; Krane, 1990; Landers & Arent, 2001; Lewis & Linder, 1997; Weinberg & Gould, 2007).

From a coaching perspective, as athletes enter into the late stages of contests or important events, some may feel a heightened or overwhelming sense of responsibility. These individuals in turn will analyze their activity and performance to a greater extent when important moments (i.e., crunch time) approach rather than let automation (i.e., muscle memory from repeated practice) take charge. Emotions generated through this process change the body's physiology and thus, impact performance (Hardy, 1996; Kemper, 1990). In the above example, Tim's respiration, heart rate, and perspiration level increased dramatically as a physiological response. Choking also accompanies the failure to block out potential unimportant cues (i.e., internal and external) because it prompts people to focus entirely on the wrong items to adequately complete the task(s) at hand. Tim struggled above to block out comments by the official and he concentrated too much on the state of his hands, legs, and possible ending of his career. Overall, the balancing act a young person faces during pressure situations appears difficult to manage. The challenge we face as coaches is to develop an understanding on how to help athletes become better performers during times of pressure.

Coaching Strategies and Tactics for Producing Ideal Performances

We accept that fans, coaches, and other peers or opponents prompt a specific emotional buildup inside individuals during times of competitive pressure, which is unhealthy for realizing an ideal performance state. To help realize an optimal ideal performance state, the work of many scholars indicates we should seek to reduce, eliminate, or control excessive emotional thoughts and behaviors in our players to help them achieve an optimal level of arousal (Poczwardowski & Conroy, 2002; Weinberg & Gould, 2007). Kemper (1990) and Hardy (1996) suggested emotions appear particularly important to manage because they prompt changes in an individual's physiology, which can affect performance. As coaches we recommend several tactics, which can help athletes learn how to manage their emotions during the season and contests.

First, with our teams, we learned to look for signs of distress to help our athletes identify when emotions will likely impose negative consequences on their performance (Greenlees, Bradley, Holder, & Thelwell, 2005). Changes in physiology (e.g., shaking, nervousness, depression, fear, elevated and unusual perspiration, visual frustration, and strain) frequently project themselves outwardly as negative body language. Players on our teams are presented with this information from members of our staff through direct comments, clip tapes during team and individual video sessions, and written evaluations to help avoid future breakdowns. Ideally, the players will learn to recognize and even look out for those physiological changes so they can utilize the appropriate coping tactic to prevent future deterioration of performance.

Implementing specific coping strategies is critical to produce success because they can help athletes manage those emotions which might negatively damage their performance. We practice and echo the advice of several

A publication from the National Association for Sport and Physical Education (NASPE), an association in the American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD)
1900 Association Drive • Reston, Virginia • 20191 • www.NASPEinfo.org • 703.476.3410
©2010 by NASPE. All Rights Reserved.

Unauthenticated | Downloaded 08/10/20 05:03 PM UTC

academic pieces on coping methods because choosing the correct coping method can dramatically increase positive results. Specifically, we offered relaxation techniques like self-distraction, deep breathing, and muscle tensing/relaxing to help reduce stress and produce positive responses (Loehr, 2005; Maynard, Hemmings, Greenlees, Warwick-Evans, & Stanton, 1998; Maynard, Hemmings, & Warwick-Evans, 1995; Maynard, Smith, & Warwick-Evans, 1995). As an example, we make our players embrace these items into their free-throw shooting routines at the beginning of each season to help demonstrate they are seeking to reduce possible anxiety related to this isolated performance. We also found preparation for this type of strategy works well with altering the conditions surrounding the free throw. For instance, we frequently create competitive conditions on each player or alter the noise and visual background they would experience in a game to make each free throw attempt appear more challenging. Other closed-skilled activities (e.g., putting, rifle shooting, serving) should also achieve similar success embracing these techniques within practice routines.

Other relaxation strategies like avoiding and ignoring distractions, isolating and detaching the self from the environment, and engaging in wishful or positive thinking are also practiced during the season by our various basketball programs (Poczwardowski & Conroy, 2002; Steptoe & Malik, 1995). Within this tactic, we tried to repeatedly remind our players, during the course of a contest that we prepared to control the environment and are adequately equipped to stay focused on our team and personal objective. To help further this goal, we also specifically try to create a pleasing environment through the listening of music (pre-game and practice) and the use of humor during discussion, teaching, and coaching opportunities (Poczwardowski & Conroy, 2002; Weinberg & Gould, 2007). We found practices, timeouts, and dead ball situations are the best time to offer humor as a distraction to create a less stressful atmosphere. Organized practice sessions serve as the best venue to begin using coping skills with your players because it is a controlled environment and easily changeable to meet your objectives. We recommend discussing these items with your team then addressing them individually with each player through the use of video support if possible (i.e., copies of games and practices) to address their specific needs.

We also promote physical (e.g., stretching) and mental routines (e.g., goal-setting, imagery, and self-talk) as positive strategies for helping performance because it improved cognitive and somatic anxiety along with a higher level self-confidence before and during the event (Adler, 1981; Hanton & Jones, 1999; Synder & Ammons, 1993; Weinberg & Gould, 2007). We feel routines helped evoke confidence in our teams because our players gained momentum toward reaching the desired level of rhythm, style, pace, and tempo they desired (Adler, 1981; Neil, Anderson, & Sheppard, 1991). Pre-game warm-ups and in-game routines were developed with our team and individual players in mind for the production of an ideal performance state. As an example, within our pre-game routine (e.g., pep talk) we meet in the locker room to discuss team and personal goals with our players. Information and knowledge provided in the pre-game meeting also serves as a powerful weapon to battle against feelings of insecurity and helpless. We recommend reviewing scouting reports and occasionally watching tape with your athletes prior to contests. These activities have adequately served to help our players secure the proper focus on the event and reassure themselves and their teammates they are prepared for competition and ready to produce the expected/possible positive outcome.

A publication from the National Association for Sport and Physical Education (NASPE), an association in the American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD)
1900 Association Drive • Reston, Virginia • 20191 • www.NASPEinfo.org • 703.476.3410
©2010 by NASPE. All Rights Reserved.

Unauthenticated | Downloaded 08/10/20 05:03 PM UTC

Another recommendation we and several other coaches support centers on practicing under conditions which simulate actual situations, environments, or opportunities provided during competition. Weinberg and Gould (2007) along with Lewis and Linder (1997) proposed that this method serves the promotion of clutch performances well because it focuses and alerts attention of participants on the self during instances of increased pressure. Ntoumanis and Biddle (1999) said this appears important because it provides the necessary internal motivation for people to succeed through a heightened attention not typically required during the beginning and middle of competitions. We believe practicing under competitive or game conditions (e.g., increasing background noise, changing the time and score, and altering the background) provides the real distractions, obstacles, and barriers individuals need to overcome before achieving success. An example of this comes in two forms: (1) self-challenge and (2) game challenge.

Self-challenge prompts athletes to pursue the maximization, improvement, or maintenance of various skills for each sport. Within practices, we regularly set specific goals for each player to challenge them in some aspect of basketball. For example, we might establish a number of shots they need to make during a drill or challenge them collectively as unit defensively (e.g., three stops in a row). Game challenges aim to provide environmental stimuli which simulate real game conditions along with specific situations to improve competitiveness and performance during those pressure-packed moments. For instance, we frequently practice late-game situations using a variety of scenarios (e.g., change the clock, score, personnel, and location of the ball) to help build excellence or increase performance in that critical environment. Creating a competitive performance chart can also help tremendously toward creating an environment which is competitive, but also one which puts an appropriate perspective on self and game challenges during moments of pressure. We found charting the behaviors and effort of our players (e.g., hustle plays – diving, deflections, steals, and interceptions, poor body language, superior or poor execution, remembering/not remembering plays) and publishing those results on a giant chart in the locker room served to provide them important information about how they contributed to the self or game challenge presented.

Conclusion

This paper briefly defined the words clutch and choke as they relate to athletic performances. The suggestions provided within this paper addressed controlling emotions, adopting coping methods, practicing under game situations, and embracing physical routines along with mental rehearsals as strategies to help athletes realize an ideal performance state. Better prepared coaches who identify when pressure appears to be influencing their athletes and train them to deal with those conditions will help athletes, like Tim, avoid the negative consequences (e.g., social anxiety, poor self-esteem/image) of failure under pressure. This is an important aspect of coaching, particularly in today's world because the media and spectators can take single moments in time and change the image of an individual (i.e., elevate them to immortal status or damage their image to match the lowest of reputations) through the growth of technology (e.g., television, radio, internet) and other new communication mediums (e.g., blogs, chat rooms, Youtube, twitter).

A publication from the National Association for Sport and Physical Education (NASPE), an association in the American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD)
1900 Association Drive • Reston, Virginia • 20191 • www.NASPEinfo.org • 703.476.3410
©2010 by NASPE. All Rights Reserved.

Unauthenticated | Downloaded 08/10/20 05:03 PM UTC

Different images combined with on-the-ground narratives by participants inevitably shape our views of performances. Furthermore, competition for customers between the various media outlets and personal attention by spectators, friends, and family also serves to prompt more and more of this outrageous behavior and the commentary it generates because of its perceived entertainment value. Coaches should discourage or warn about the use of these potential labels, especially those associated with choking and call on spectators and the media to handle these unique situations or instances with greater caution or celebration. Coaches can demonstrate vigilance in policing the media and spectators for such damaging remarks through meeting with the media, family, and spectators to describe desirable conditions for participation and expectations for their behavior. We recommend holding a 'Meet the Team Night,' creating parent newsletters, and planning time during pep rallies to describe your expectations. We found each of these tactics as useful to help these groups understand their responsibility toward helping young people secure a more positive experience and relationship with sport and physical activity.

About the Authors

Chad Seifried is an assistant professor in the Sport Management program at Louisiana State University. Dr. Seifried coached basketball at the college and high school level since 1999, in Kentucky, Ohio, and Pennsylvania. Prior to 1999, he was a member of the Penn State men's basketball program under Jerry Dunn. He is a member of the NABC, NIAAA, NASSM, NASSH, and several other well respected organizations. Dr. Seifried also presented and published several articles on coaching related-topics. He can be contacted at cseifried@lsu.edu.

Matthew Papatheodorou graduated from The Ohio State University in 2008 with a master's degree from their sport management program. Mr. Papatheodorou interned with the Ohio High School Athletic Association (2007-2008), worked for the Philadelphia 76ers (2008) in basketball operations, and currently works for the Cleveland Cavaliers. Mr. Papatheodorou can be contacted at papatheodorou.3@gmail.com.

References

Adler, P. (1981). *Momentum*. Beverly Hills, CA: Sage Publications

Albert, J. & Bennett, J. (2001) *Curve Ball*: Copernicus Books.

Baumeister, R. F. (1984). Choking under pressure: Self-consciousness and paradoxical effects of incentives on skillful performance. *Journal of Personality and Social Psychology, 46,* 610-20.

Beilock, S.L., & Carr, T.H. (2001). On the fragility of skilled performance: What governs choking under pressure? *Journal of Experimental Psychology, 130* (4), 701-25.

A publication from the National Association for Sport and Physical Education (NASPE), an association in the American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD)
1900 Association Drive • Reston, Virginia • 20191 • www.NASPEinfo.org • 703.476.3410
©2010 by NASPE. All Rights Reserved.

Unauthenticated | Downloaded 08/10/20 05:03 PM UTC

Birnbaum, P. (2005). Clutch hitting and the Cramer Test. *By the numbers: The newsletter of the SABR statistical analysis committee 15*, (1), 7-13.
Cramer, R.D. (1977). "Do Clutch Hitters Exist?" *Baseball Research Journal* 6, 74-79.

Greenlees, L., Bradley, A., Holder, T., & Thelwell, R. (2005). The impact of opponents' non-verbal behavior on the first impressions and outcome expectations of table-tennis players. *Psychology of Sport and Exercise, 6*, 103-15.

Hanton, S., & Jones, G. (1999). The effects of a multi-modal intervention program on performers. II: Training the butterflies to fly in formation. *The Sport Psychologist, 13*, 22–41.

Hardy,L. (1996) Testing the predictions of the cusp catastrophe model of anxiety and performance. *The Sports Psychologist, 10*, 140-156.

James, B. (2004). Underestimating the fog. *The Baseball Research Journal, 33*, 29-33.

Kemper, T. (1990). *Social Structure and Testosterone*. New Brunswick, NJ: Rutgers University Press.

Krane, V. (1990). Anxiety and athletic performance: A test of the multi dimensional anxiety and catastrophe theories. Unpublished doctoral dissertation, UNC-Greensboro.

Landers, D.M. & Arent, S.M. (2001). Physical activity and mental health. In R. N. Singer, H. A. Hausenblas & C. M. Janelle (eds.), *Handbook of Sport Psychology* (2nd ed., pp. 740-65). New York: Wiley.

Lewis, B.P. and Linder, D.E. (1997). Thinking about choking? Attentional processes and paradoxical performance. *Society for personality and social psychology, 23*, 937-44.

Loehr, J. (2005). Leadership: Full engagement for success. In S. Murphy (ed.). *The sport psych handbook* (pp.155-70). Champaign, IL: Human Kinetics.

Maynard, I. W., Hemmings, B., Greenlees, I. A., Warwick-Evans, L., & Stanton, N. (1998). Stress management in sport: A comparison of unimodal and multimodal interventions. *Anxiety, Stress and Coping: An International Journal, 11*, 225–246.

Maynard, I. W., Hemmings, B., & Warwick-Evans, L. (1995). The effects of a somatic intervention strategy on competitive state anxiety and performance in semi-professional soccer players. *The Sport Psychologist, 9*, 51–64.

A publication from the National Association for Sport and Physical Education (NASPE), an association in the American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD)
1900 Association Drive • Reston, Virginia • 20191 • www.NASPEinfo.org • 703.476.3410
©2010 by NASPE. All Rights Reserved.

Unauthenticated | Downloaded 08/10/20 05:03 PM UTC

Maynard, I.W., Smith,M. J., &Warwick-Evans, L. (1995). The effects of a cognitive intervention strategy on competitive state anxiety and performance in semi-professional soccer players. *Journal of Sport and Exercise Psychology, 17*, 428–446.

Neil, G., Anderson, B., & Sheppard, W. (1991). Superstitions among male and female athletes of various levels of involvement. *Journal of Sport Behavior, 4*, 137-48.

Ntoumanis, N. & Biddle, S.J. (1999). A review of motivational climate in physical activity. *Journal of Sport and Social Sciences, 17*, 643-65.

Pocwardowski, A. and Conroy, D. E. (2002). Coping responses to failure and success among elite athletes and performing artists. *Journal of Applied Sport Psychology, 14,* 313-29.

Silver, N. (2006). Is David Ortiz a clutch hitter? In J. Keri (Ed.). *Baseball Between the Numbers* (pp. 14-34). New York: Basic Books.

Steptoe, A. & Malik, F. (1995). The impact of stage fright on student actors. *British Journal of Psychology, 86*, 27-40.

Weinberg, R., & Gould, D. (2007). *Foundations of Sport Psychology*. (4th ed.). Champaign, IL: Human Kinetics.

A publication from the National Association for Sport and Physical Education (NASPE), an association in the American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD)
1900 Association Drive • Reston, Virginia • 20191 • www.NASPEinfo.org • 703.476.3410
©2010 by NASPE. All Rights Reserved.

Unauthenticated | Downloaded 08/10/20 05:03 PM UTC