



The Cognitive Appraisal Process of Collegiate Baseball Players While Playing Defense



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ABSTRACT

Appropriately interpreting and managing environmental stressors is a significant predictor of athletic success. Lazarus and Folkman's (1984) transactional model provides an effective framework for examining such cognitive appraisals. Baseball also provides a unique opportunity to examine these processes. The game involves long periods of inactivity during competition. The pitcher is the only athlete playing at his own pace; other players must wait for balls to come to them rather than control the action directly. This gap between plays can influence infielders because it offers them lengthy periods of time to overanalyze their performance. Five male collegiate baseball infielders were interviewed. Inductive analysis (Lincoln & Guba, 1985) of the interviews showed four themes related to primary appraisal, secondary appraisal area, reappraisal area, and field position property area. The results suggest Folkman and Lazarus' (1984) transactional stress model is an effective framework to understand infielders' cognitive appraisals. That is, infielders appraise an event by a complex cognitive process based on personal and situational factors. Moreover, field position property is an important factor in infielders' cognitive appraisals. That is, depending on their specific positions, infielders have inclinations that exert different influences on their cognitive appraisals. Implications of these results for performance and coaching will be discussed.

INTRODUCTION

- Features of baseball
 - Team sport
 - Divided into both offense and defense
 - Each player is require to play both
 - Use different equipment while playing offense and defense
 - **Time interval between activities**
- Time interval between activities
 - A pitcher is the only one person who can play at his own pace
 - A hitter surely predicts when a ball will be coming to him
 - A infielder needs to wait for the times when the ball will be coming to him
- Two hypothetical players - two different appraisals
 - **Player A:** "If I throw the ball away, a run will score. Our team will lose a game because of my error. The coach will lose confidence in me, and I'll lose my position. I hope the next ball doesn't come to me."
 - **Player B:** "Now is the moment that will decide our fate. I will catch every batted ball. This is a good chance to show my fielding. All I have to do is relax and react quickly to a ball. Now, come on and hit to me."

STUDY PURPOSES

1. To describe the cognitive appraisal process of baseball infielders while playing defense
2. To delineate thought patterns that influence cognitive appraisal.

METHODS

Participants

Male collegiate baseball players

- NCAA Division 1 institution, located in the Midwest
- All infielders
- 19-21 years old (M = 20.2)
- 14-16 years of experience playing baseball (M = 15.2)

Procedures

Interview

- 45 - 90 minutes
- An interview guide was developed to standardize the questioning of each participant and minimize interview bias.
- Sample questions
 - **What do you think about during the time interval while playing defense?**
 - **How do you feel if a ball rarely comes to you during a game?**

Analysis

1. All interviews were recorded and transcribed verbatim.
2. The researcher developed familiarity with all interviews by reading transcriptions and listening to the interview tapes.
3. Raw data themes were identified.
4. The raw data themes were divided into interpretable categories.
5. The researcher was organize hierarchically divided raw data themes from specific to general.

RESULTS & DISCUSSION

The results are discussed via the model's three cognitive appraisal processes: (1) primary appraisal, (2) secondary appraisal, and (3) reappraisal or continuous appraisal. Field position properties were summarized in a different matrix as another important factor for infielders' cognitive appraisal.

Primary Appraisal

Primary appraisal serves a judgment stage for individuals. Infielders judge a given event by using both person and situational factors. Seven general dimensions emerged from the interview to help explain in this process; experience, beliefs, commitments, time, situational demands, and uncertainty.

Experience (Predictability)

This guy...the first time flew out to right field...grounded to a first-basemen...hit a grounder up the middle...so you know that he hits the ball to the right side...so you can adjust yourself mentally and physically to the position that you need to be in and then when the balls hit to you.

If you see someone struggle with one play...then you see them when they have that play they shy away or tend to make another error on that play because their confidence from their past situations...their experience was negative and somehow mentally that always keeps coming up.

Experience (Novelty)

People always talk about first-game jitters and what not...and I think it's absolutely true...if you have nothing to look back to in that first game...it's hard to visualize...it's hard to be confident only with practice

I've actually never really played shortstop before and then coming in as a freshman and playing some shortstop you know...in some big games...it's kind of nerve racking

Commitments

Vulnerability:

Someone might say..."Oh...well it's just one ground ball." but to me one ground ball feels like...you know...like maybe the last...I'm going to say the last ground ball.

Work Ethic:

You know...staying after...hitting extra...fielding extra ground balls...that's what's going to...you know...that shows my commitment and then that's going to help me move on...hopefully to that next level.

Social factors:

If I could become a professional baseball infielder or something...then you know...they make pretty good money...knowing that I could like... **support my parents** and stuff...they wouldn't have to work anymore.

I always want to do my best because there's always a chance that if you're not doing well...perhaps your **scholarship** can be reduced at times and stuff like that...so...you always want to be committed...while you're playing because you never want to let down and show that to your coaches.

Time

Imminence:

I feel like there's a lot of game left to make up for a mistake but when the game comes closer to the end...that's...you know... when the pressure gets a little bit higher...in a close game because you don't have time to make up for mistakes.

Temporal Uncertainty:

If I have a bad day...they might sit me one day...if I had a bad practice ...they might sit me out and so that's why I think...when I get into the game I have a little more stress because I'm not as comfortable yet.

Concentration:

I'm just thinking about trying to make the plays...besides that...I'm not trying to think about anything else and I'm not trying to think about what happened before...what might happen the next inning...I'm just trying to focus on that exact moment.

Secondary Appraisal

Secondary appraisal is the individual assessment phase regarding the athlete's coping options. Infielders judged coping options to the situation based on their primary appraisal.

Influence factors of players' coping selection

- Experience
- Outcome
- Social factors

Selected coping strategies/Evaluation of coping strategy

- *Problem-focused coping*
Self-talk, positive thoughts, communication, and rational thought
- *Emotional-focused coping*
Music, deep breathing, attention avoidance, wish thoughts, communication, rational thoughts, and routine

Reappraisal

Reappraisal is the final stage of the appraisal process and occurs as a results of both the primary and secondary appraisal processes.

Long-term Reappraisal Process

- Learning
- Practice
- Playing Time

Short-term Reappraisal Process

- Inactive Time
- Thoughts

I've been hitting the ball really well so I think my fielding is going to start coming up a little bit...so as the year goes on...I get better...and so...I feel as if the more...you know... time I get to play the game...the more my fielding goes up

When you get back in the dug-out you could think of something like...what was I thinking at that time...mentally...where could I have been thinking of something else...you know...if you make a mental mistake you try to point out why you made that mental mistake

Field Position Property

In the sport setting, field position property may play an important factor for cognitive appraisal. In the interviews, second basemen and shortstops showed different responses from first-basemen and third-basemen on some points.

Second Baseman/Shortstop

- Role
 - Leader
 - Control
 - Emphasis on fielding
- Task
 - Complex
 - Can't Prepare

First/Third Baseman

- Role
 - Making the plays
 - Holding a runner
- Task
 - Simple
 - Preparation

- Mentally tough position
- Expectation from others

- Baseball is mentally tough
- Negative self-evaluation

I personally feel that you can't prepare for every situation in a baseball game

Usually I prepare myself for any situation and the coaches should prepare their players for every situation possible

CONCLUSIONS

1. The transactional model is effective as a framework to understand infielders' cognitive appraisals.
2. Infielders appraise the event by a complex cognitive process based on person and situational factors.
3. Field position property influences players' cognitive appraisal.

