Assessment of Coach Emotions (ACE)
Coding Manual

Last updated: February 24th, 2014
Assessment of Coach Emotions (ACE) Coding Structure Overview:

**Initiator Code:**
Coach (z)

**Content Codes:**
- Organization (10)
- Keeping Control/Standards of Behaviour (11)
- Hustle (12)
- Instruction/Feedback (13)
- Encouragement (14)
- Positive Evaluation (15)
- Negative Evaluation (16)
- Questioning (17)
- General Communication (18)
- Communication with Others (77)
- Observation (88)
- Not Engaged (99)
- Not Code-able (x)

**Emotion Codes:**
- **Positive**
  - Happy (31)
  - Affectionate (32)
  - Alert (33)
- **Neutral**
  - Neutral (41)
- **Negative**
  - Tense (51)
  - Anxious (52)
  - Angry (53)
  - Disappointed (54)

**Recipient Codes:**
- Individual Athlete (i)
- Team (t)
General Overview:

The Assessment of Coach Emotions (ACE) coding system was developed for observations of coaches in a team sport environment. This coding manual is intended for observation of team practice/training time, but may also be applied to the competition environment.

The codes comprising the ACE represent coaches’ behaviours according to the following three (3) components:

1. Coach content (the content of a given coach behaviour)
2. Coach emotion (the emotion accompanying a given coach behaviour)
3. Recipient subject (target of interactive coach behaviour and/or emotion)

Content codes describe the content of a given coach behaviour. For each code-able content code (i.e., all codes except ‘not code-able’), an emotion code, describing the emotion accompanying a given coach behaviour, must also be assigned. For any interactive or communicative code (i.e., organization, keeping control/standards of behaviour, hustle, instruction/feedback, encouragement, positive evaluation, negative evaluation, questioning, general communication), with the exception of ‘communication with others,’ a recipient subject or target of such behaviour must also be coded.

If there is a change to any of these codes (content, emotion, or recipient subject), the coder must begin a new entry and code as a new independent coach behaviour.
General Rules:

3-second rule
1. Wait three (3) seconds before coding ‘observation’ when changing from any actively communicative code. Code for this behaviour only if it continues past the three (3) second waiting period. If within three (3) seconds a different actively communicative behaviour occurs, do not wait to code that behaviour.
2. Wait three (3) seconds before coding ‘not engaged’ when changing from any actively communicative code. Code for this behaviour only if it continues past the three (3) second waiting period. If within three (3) seconds a different actively communicative behaviour occurs, do not wait to code that behaviour.
3. Wait three (3) seconds before coding ‘uncodable’ when changing from any other code. Code for this behaviour only if it continues past the three (3) second waiting period. If within three (3) seconds a different behaviour visibly or audibly occurs, do not wait to code that behaviour.

Default codes
1. For each content and emotion code, specific codes are to be utilized by default if criteria for any other code are not met. That is, use the default codes in the absence of any other code-able behaviour or emotion:
   - Content: Observation
   - Emotion: Neutral
2. For subject codes, the initiator will always be coded as the coach. Recipients will always be coded as team, unless the behaviour or emotion is targeted at one particular athlete (recipient code: individual) or any non-athlete (content code: communication with others; no recipient code required).
Subject Codes:

Initiator
As coaches will be the focus of all coding, initiator codes will be limited to the coach.

Code ‘z’ for coach.

Recipient
Due to the nature of the team sport environment, coaches will often address the team as a unit, in smaller groups (e.g., based on positions, during drills, etc.), or at the level of each individual athlete.

When the coach is interacting with a single athlete, an ‘individual athlete’ subject code will be employed. Code ‘individual athlete’ anytime a statement or behaviour from the coach is obviously directed toward one particular athlete. Start a new ‘individual athlete’ code whenever a new recipient is addressed, even if the actual codes remain the same (e.g., encouragement-neutral-individual [A] to encouragement-neutral-individual [B]).

Code ‘i’ for individual athlete.

A ‘team’ subject code will be employed anytime the coach is addressing two or more athletes at a given time. Additionally, the ‘team’ subject code will be the default code anytime there is uncertainty regarding the intended target of the coach’s interactive behaviour. As long as the content and emotion codes remain constant, do not start a new ‘team’ code when the coach addresses a new group of athletes (e.g., if the athletes are divided into groups during a drill and the coach addresses each group individually with the same information, do not start a new recipient code).

Code ‘t’ for team.

If the coach interacts with any non-athletes (e.g., assistant coaches, parents), employ the ‘communication with others’ content code, and no recipient code is required.
Content Codes:

1. Organization (Code 10)

Description: Communication from coach related to organization of practice tasks and athlete actions, NOT intended to directly influence performance.

Indicators/Notes:
- E.g., “Now we’re doing ___ drill,” “Go over there,” “Do 10 of these,” etc.
- Cannot include any technical/tactical instruction related to movement quality or encouragement. Code for each separately, even if they occur in immediate sequence (e.g., “Get set up for line drills now. Focus on pointing your toes. I know you guys can do it!” to be coded as ‘organization,’ then ‘instruction/feedback,’ then ‘general encouragement’).
- May include statements such as “Let’s go” or “Here we go” when indicating the start of scrimmage or drill, but not for the purposes of reinforcing support (encouragement) or effort (hustle).
- Primarily verbal communication; does not include drill or practice set-up (e.g., positioning cones) that does not involve active interaction with athletes (not engaged).
- Includes timing or counting during skill execution/drills.
- Requires associated emotion code and recipient subject code.

2. Keeping Control/Standards of Behaviour (Code 11)

Description: Communication from coach intended to maintain order in response to athletes’ inattentiveness, disruptive non-task related conduct, etc., OR to uphold expected standards of behaviour (including physical, social, or moral behaviour) on the part of the team.

Indicators/Notes:
- E.g., “Woah, woah, woah!” “Hurry up!” “Stop talking!” etc. (in response to inattentiveness, physical misconduct, etc.).
- May involve disciplinary intervention (e.g., punishment) or statements regarding expectations or criteria for appropriate behaviour.
- Can include general social or moral topics relating to intra- and inter-personal conduct (e.g., respect, support, empathy/understanding, representing the team, etc.) but CANNOT include performance-specific topics (e.g., team coordination to run a specific tactical maneuver, etc.).
- Requires associated emotion code and recipient subject code.

3. Hustle (Code 12)

Description: Verbal statements intended to activate or intensify the efforts of the athlete(s).
4. Instruction/Feedback (Code 13)

**Description:** Technical and/or tactical instruction and/or feedback from coach, directed at athletes’ motor and/or psychological skill execution or performance.

**Indicators/Notes:**
- MUST include prescriptive/corrective technical information in reference to the quality of motor or psychological skill execution (e.g., how the skill should be executed, how the skill can be improved, etc.).
- Can include general psychological topics related to performance (e.g., confidence, focus, mental toughness, etc.) or specific strategies intended to improve the psychology of performance (e.g., imagery, self-talk, goal-setting, etc.).
- Requires associated emotion code and recipient subject code.

5. Encouragement (Code 14)

**Description:** Non-technical encouragement or support from coach directed toward athletes’ present or future performance or behaviour, as well as athletes’ errors or mistakes.

**Indicators/Notes:**
- Focus on present/future behaviours (general encouragement): e.g., “Let’s go guys!” “You can do it!” “Make it count!” etc.
- Focus on errors/mistakes (corrective encouragement): e.g., “You’ll do better next time,” “Don’t worry about it,” “That’s OK,” etc.
- Voice may convey excitement or a warm/supportive tone.
- Requires associated emotion code and recipient subject code.

6. Positive Evaluation (Code 15)

**Description:** Non-technical positive reaction by coach to desirable performance by athlete(s).

**Indicators/Cues:**
- Focus is on success.
• Can be verbal (e.g., “Good work,” etc.) or non-verbal (e.g., thumbs up, high five, etc.).
• If non-verbal, communication must be very obvious.
• CANNOT include any technical instruction related to movement quality.
• Requires associated emotion code and recipient subject code.

7. Negative Evaluation (Code 16)

Description: Non-technical negative reaction by coach to an undesirable performance by athlete(s).

Indicators/Cues:
• Can be verbal (e.g., “That was terrible,” sarcasm, etc.) or non-verbal (e.g., shaking head, etc.)
• If non-verbal, communication must be very obvious.
• Must include an evaluative word or implied meaning.
• CANNOT include any technical instruction related to movement quality.
• Requires associated emotion code and recipient subject code.

8. Questioning (Code 17)

Description: Questions posed by the coach to the athlete(s) for the purpose of either: (a) assessing technical or tactical knowledge of a skill, procedure, routine, or drill; or (b) to elicit the feelings, thoughts, and opinions of athletes with respect to personal performance or skills or practice set-up. May elicit a verbal or non-verbal response.

Indicators/Cues:
• (a) E.g., “What are the five key points to remember about butterfly technique?” “Can anyone show me how to do a proper corner kick?” etc.
• (b) E.g., “Do you feel that you’ll be able to do this drill?” “What position would you like to play in this scrimmage?” etc.
• Athletes may or may not be engaged in an activity during this time.
• When the content of a question does not fit the description of either (a) or (b), code the category under which the description fits best (i.e., any category EXCEPT ‘questioning,’ ‘organization,’ or ‘instruction/feedback’).
• Does not include rhetorical statements or questions followed by phrases such as “Right girls/boys?”
• Coach may be posing questions, listening to athletes’ responses, or responding with follow-up questions when employing this code; if coach’s response best fits a different category, then code the most appropriate category.
• Requires associated emotion code and recipient subject code.

9. General Communication (Code 18)

Description: Communication from coach unrelated to task or performance.
**Indicators/Notes:**
- E.g., joking with athletes, talking about school, reminiscing about old players, etc.
- May or may not be related to sport, but CANNOT be related to performance of the specific skill, drill, or practice-related task (e.g., teasing athletes about breaking the equipment during a drill would be coded as ‘general communication’).
- Requires associated emotion code and recipient subject code.

**10. Communication with Others (Code 77)**

*Description:* Communication from the coach directed toward any individual(s) other than the athletes (e.g., assistant coaches, parents, etc.)

*Indicators/Notes:*
- Can be any topic of communication (including sport or non-sport related).
- Active communication; includes listening and responding.
- Assistant coach may address the coach and the team for the purposes or organization, instruction/feedback, etc. If the coach continues discussion with the assistant coach, code as ‘communication with others’. If the coach listens but does not provide any input, code as ‘observation’.
- Requires associated emotion code but no recipient subject code.

**11. Observation (Code 88)**

*Description:* Coach engaged in observing/watching athletes during practice activities, though not directly communicating with athletes.

*Indicators/Notes:*
- Default code if coach is engaged in training/competition activities but criteria not met for any actively communicative code.
- 3-second rule in effect before coding for ‘observation’ from an actively communicative code.
- Requires associated emotion code but no recipient subject code.

**12. Not Engaged (Code 99)**

*Description:* Coach not engaged or communicating directly with athletes in training or competition activities.

*Indicators/Notes:*
- E.g., organizing notes, setting up/taking down equipment for drills, etc.
- Coach is not paying attention to practice activities or athletes in general
- High threshold to code ‘not engaged.’
- 3-second rule in effect before coding for ‘not engaged’ from an actively communicative code.
• Requires associated emotion code but no recipient subject code.

13. Not Code-able (Code ‘x’)

Description: Visual or audible information unavailable for coding.

Indicators/Notes:
• To be coded if coach is out of view with no verbal communication detected or microphone cuts out.
• 3-second rule in effect before coding for ‘not code-able.’
• No associated emotion or recipient subject code.
Emotion Codes:

General Notes:
- Pay particular attention to voice tone/content, facial expressions, and body language when determining each emotion code. Depending on the setting/quality of the video, it may be necessary to rely on certain cues more than others (e.g., during an outdoor drill, may need to rely more on verbal cues; during small group meetings or instruction, non-verbal cues may be more clear).
- Never rely on one cue only to make an emotion coding decision; rather, rely on a combination of cues to determine the specific emotion.
- When there is inconsistency between voice, body language, and facial expression, voice takes precedence in all cases except for a neutral code. In a situation where it is unclear if the code is neutral or some other emotion code, code the other emotion.
- If the cues appear to divide evenly between two different emotion codes, code your first instinct (‘gut feeling’).
- For some codes, there may be a range of intensities associated with the particular emotion the code represents (e.g., a relatively low-level form of anger may be frustration or irritation, while a high-level form of anger may be described as rage). For the purposes of this coding system (being in its initial development), all levels of intensity for a particular emotion will fall under the same code.
- It may be necessary to first watch the video, or a clip from the video, before doing any coding to get a general sense of the coach’s baseline emotional tone or tendencies (may include habits or mannerisms exhibited by the coach in particular emotional situations).

Positive Codes (30’s)

1. Happy (Code 31)

Description: Verbal or non-verbal expressions that indicate the coach is experiencing joy or pleasure in response to some stimulus or event (real or perceived) in the sport environment.

Descriptors: amiable, amused, animated, content, elated, enthusiastic, excited, overjoyed, pleased, thrilled.

Indicators/Notes:
- Voice is high-pitched or fast-paced.
- Smiling, laughter, giggling, etc.
- Coach sounds or appears genuinely pleased (e.g., you can ‘hear’ the smile in the coach’s voice).
- Exaggerated, expansive, or animated expressions/exclamations (e.g., “Great play team!”) or actions/gestures (e.g., bouncing up and down with excitement).
- Reactions may be unanticipated or sudden in response to some occurrence or event (e.g., an athlete scores a goal).
• May include light-hearted, shared humour (i.e., not intended to be harmful or demeaning).
• Often appears infectious among others.
• Often a responsive emotion; expressed in response to some pleasing event or occurrence.

2. Affectionate (Code 32)

Description: Verbal or non-verbal expressions that indicate the coach is conveying warmth, caring, concern, support, and/or interest in the athlete(s). In general, the coach adopts an empathetic manner and expresses a sense of endearment.

Descriptors: appreciative, approving, caring, comforting, concerned, empathetic, endearing, interested, reassuring, responsive, supportive, warm.

Indicators/Notes:
• Tone of voice may be warm/soothing (conveying caring/support) or high-pitched/‘sing-song’ rhythm (conveying enthusiasm/interest).
• Caring or concerned statements (e.g., “Are you feeling OK?”).
• General support and reassurance (e.g., “If anyone can make this penalty shot, it’s you!”).
• Verbal statements or facial expressions conveying sympathy, understanding and encouragement (e.g., “I know this drill is tough/you’re feeling tired,” warm, affectionate smiles or gazes).
• Compliments.
• Good-natured joking or teasing.
• Gestures of support/endearment (e.g., pat on the back, ruffling player’s hair, etc.).
• Often expressed proactively towards another individual; does not occur passively.

3. Alert (Code 33)

Description: Verbal or non-verbal expressions that indicate the coach is experiencing high levels of arousal or intensity; alert responses and expressions will be relatively neutral, but maintain a slight positive valence (e.g., similar to enthusiasm or excitement).

Descriptors: active, attentive, energetic, engaged, intent, vigilant.

Indicators/Notes:
• Voice is faster or louder than usual (Note: Only code ‘alert’ if the coach is being loud due to arousal/excitement; do not code ‘alert’ if the coach is being loud because he/she needs to be).
• Short, unanticipated exclamations; intended to reinforce or motivate particular behaviours (e.g., “You’ve got this…Go, go, go!”).
• Full engagement in practice activities and focused attention; no signs of distraction (e.g., eyes fixed on athlete or play; no fidgeting or looking away).
• May appear ‘wound up,’ but overall demeanor is positive.
Often a responsive emotion; expressed in response to athletes’ effort or performance.

Neutral Codes (40’s)

4. Neutral (Code 41)

*Description:* Verbal or non-verbal expressions from the coach associated with a non-affective, even-tempered quality. Cues do not indicate the presence of any other emotion and will often correspond to unvalenced (‘matter-of-fact’) information exchange or general observation.

*Descriptors:* calm, even-tempered, flat, matter-of-fact, monotone.

*Indicators/Notes:*
- Flat, even, or monotone voice quality.
- Neutral facial expression (e.g., not smiling, frowning, etc.).
- Common during information exchanges (e.g., organization, instruction) and observation.
- Default emotion code if criteria for any other emotion are not met or if there is any uncertainty.
- Note: It is important to become familiar with the characteristic neutral expressions and behaviours of each coach prior to beginning coding (different people have unique habits or mannerisms that may appear affective if the observer is unfamiliar with them).

Negative Codes (50’s)

5. Tense (Code 51)

*Description:* Verbal or non-verbal expressions that indicate a sense of urgency, exasperation, or impatience conveyed by the coach; tense responses and expressions will be relatively neutral, but maintain a slight negative valence (e.g., may appear serious or stern).

*Descriptors:* Agitated, apprehensive, edgy, exasperated, impatient, irritated, frustrated, panicky, restless, stressed, uneasy.

*Indicators/Notes:*
- Tone of voice conveys a sense of urgency/changes in voice rhythm or tempo (e.g., particular words may be drawn out or emphasized, tempo may increase or decrease with level of arousal).
- Verbal statements are often authoritative or directive (e.g., “Hurry up! We don’t have time to waste!”)
- Stern or serious demeanor/rigid body posture (e.g., crossed arms, clenched jaw or teeth, etc.)
- May resemble a low-level form of either anxiety or anger (i.e., has the potential to evolve into one of these emotions at a more intense level)
- Often a responsive emotion; expressed in response to athletes’ (likely sub-par) effort or performance

6. **Anxious (Code 52)**

*Description*: Verbal or non-verbal expressions that indicate the coach is experiencing general discomfort or anxiety (i.e., nervousness, fear, embarrassment, worry, or shock) in response to some stimulus or event (real or perceived) in the sport environment.

*Descriptors*: afraid, concerned, embarrassed, fearful, nervous, shocked, startled, worried.

*Indicators/Notes*:
- Elevated voice tone, typically accompanied by rapid speech
- Voice wavers or fluctuates
- Stuttering or difficulty speaking
- Nervous smiling or laughter (e.g., smile appears ‘pasted on,’ laughter is unshared or out of place)
- Tense or rigid body postures
- Rapid, repetitive body movements or fidgeting (e.g., wringing hands, picking at clothing)
- Watch for individually-neutral mannerisms or behaviours that may resemble anxious cues (e.g., nail biting, becoming distracted by some object or event) but are not actually associated with an anxious response

7. **Angry (Code 53)**

*Description*: Verbal or non-verbal expressions that indicate the coach is experiencing anger, displeasure, or hostility. Often an angry reaction will indicate that some interpersonal boundary or standard has been transgressed (i.e., the coach has been offended in some way). Anger may also be coded in the case that the coach ridicules, mocks, or is sarcastic to the athlete(s) (i.e., humour is delivered with malicious intent).

*Descriptors*: abusive, aggravated, annoyed, belligerent, callous, cold, contemptuous, cross, disgusted, displeased, enraged, furious, harsh, perturbed.

*Indicators/Notes*:
- Loud or hostile voice tone.
- Yelling or screaming.
- Changes in rhythm of speech or the way certain words are expressed (e.g., “Come on guys”).
- Sarcasm, mockery, or unreciprocated humour (e.g., may be demeaning or offensive).
- Commanding statements (e.g., “Stop that!”).
- Forceful or threatening gestures (e.g., threatening with a fist or raised hand).
• Signs of visible impatience (e.g., crossed arms, fixed stares, finger/foot tapping, etc.).
• Clenched jaw or teeth.
• Antagonistic non-verbal behaviour (e.g., sneering, rolling eyes upward).
• Note: Anger may appear at a range of intensities. Relatively low-level forms of anger (e.g., frustration or impatience) may be coded as ‘tense,’ while at higher intensities (e.g., hostility or rage) should be coded as ‘anger.’

8. Disappointed (Code 54)

_Description_: Verbal or non-verbal expressions that indicate the coach is experiencing resignation, hopelessness, or disappointment. Feelings of disappointment will likely accompany situations in which personal expectations or expectations placed on athlete(s) are not met.

_Descriptors_: defeated, dejected, depressed, discouraged, dissatisfied, morose, resigned, sad, somber, sullen, upset.

_Indicators/Notes:_
• Slow pace of speech; words or names may be drawn out or emphasized (e.g., may sound like whining).
• Low, monotone tone of voice.
• Statements of disappointment or dissatisfaction (e.g., “I expected better from you”).
• Pouting or frowning (e.g., expressing disapproval).
• May appear withdrawn or more visibly upset (e.g., sighing, shaking head, etc.).
• Exasperated laughter (i.e., expressing disbelief or dissatisfaction).
• Often expressed in response to athlete or team performance or behaviour falling short of an expected standard (coach may feel disappointed in personal ability to teach/lead or athletes’ ability to follow through).
## Summary: Assessment of Coach Emotions (ACE) Codes

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<th>Content Code</th>
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Instructions for Coder Training:

1. Extensive study of the ACE coding manual.
   a. Trainee should be able to define and identify all code categories on paper before moving on to the next step.
2. Group instruction in use of the scoring system, including viewing and discussion of a videotaped training module.
   a. Trainer will show videotaped examples of various code categories.
   b. Trainees will be able to begin identifying categories on their own with trainer present.
   c. Trainer will be available to respond to questions and facilitate discussion surrounding important coding points.
3. Independent practice using the ACE coding system with practice videos
   a. Extensive practice will be required before the trainee is competent enough to move on to reliability testing.
   b. A trainer will be available to respond to questions and ensure the trainee is learning to code effectively.
4. Assessment of reliability.
   a. Once the trainee feels competent on use of the ACE coding system and the trainer feels that he/she is ready to move forward with reliability testing, the trainee will complete coding of two 10-minute video test segments.
   b. These test segments will be compared against a “gold standard” of coding to be completed by the trainer (i.e., the trainer will code the same two 10-minute video test segments).
   c. Percentage reliability will be assessed for content and emotion codes. Trainees will be required to meet a minimum agreement of 75% for each of these code categories before moving on to coding for research purposes.
5. Coding for research purposes.
   a. Once the trainee has performed extensive independent practice, achieved an adequate level of reliability, and feels competent on use of the ACE coding system, he/she will be able to begin coding videos for research purposes.