Development of coach competency evaluation instrument of football school

Adi Sucipto, Toho Cholik Mutohir and Andun Sudijandoko

Abstract
The research aimed at developing the coach competency evaluation instrument of Football School (CCI-FS). The research method by using Research and Development (R&D). The instrument development is begun with literature review and empirical investigation. Empirical investigation by using nominal group technique (NGT) by collecting the coach competency items come from the senior coach. Then the literature review results and empirical investigation results compiled through item pool and screening of item pool (Q-sort). Validity and reliability of instrument were tested by factor analysis. The development results of CCI-FS obtained 33 instrument items that formed five competency dimensions: communication, leadership, coaching, sport specific and character; validity (corrected item total correlation) with score range of .296 - .575, and CCI-FS reliability with cronbach’s alpha score of 0.919.

Conclusion: Coach competency instrument of football school (CCI-FS) that is developed can be used to evaluate the coach competency of football school validly and reliably.

Keywords: Instrument development, evaluation, competency, football school coach

1. Introduction
In the midst of football school luster in Indonesia, raising assumption about the low quality of the football school (FS). Not only about the provided facilities, but also the coach qualification which according to the preliminary survey did not show standard competency qualification. There are FS that all of its coaches do not have licenses. Beside that, based on the references and facts in field, no data about the coach effectiveness in coaching, no data about competency level of coaches in Great Malang. Competency of FS coaches can be known by measuring and evaluating. In other side, no special instrument can be used to measure the FS coaches competency. The problem can be overcome by making or developing instrument that can be used to measure and evaluate the FS coaches competency. Specifically the problem formulation of the research: how to develop the coach competency evaluation instrument of football school validly and reliably? While the research goal is to develop the coach competency evaluation instrument of football school (CCI-FS) validly and reliably. The instrument specification and characteristic is the instrument can be used to measure and evaluate the coach competency of football school in the form of questionnaire. The questionnaire instrument contain the statement of coach competency items with score 1-5 (very poor, poor, fair, good, very good).

1.1 Coach Competencies Review
Coach has very important role in forming the behavior and character of athlete in sport and life in society. It is in line with Kowalski (2013) [11] Coaches influence children’s experiences in sports and have a significant impact on the psychosocial development of young athletes. It is important to understand the coaching-related components of youth sports, including game strategy, motivation, teaching technique, and character building. Coach is profession that need skill supported by modern science and technology. A coach has main task that is delivering the athletes reach top performance. The top performance only can be reached through long exercises, done in program, systematically, directed and continuously.
The exercise process is physical and mental activities done by athletes under guidance of coach. The coach quality very determine the athlete success. Qualified coach is those who have capability to coach determined by the level of knowledge, attitude, and skill owned suitable with the sport under coach. Coaching is not enough by only rely on the skill only, but also supported by knowledge especially about coaching. Bompa (1990) [6], coaching knowledge that should be mastered by coach including theory and methodology of training.

Mastering the sport branching and coaching experience not automatically make him respected coach, except he has character and philosophy as coach. Coach philosophy owned by coach can be used as foundation in doing his task as professional coach (Martens, 2004) [14]. Beside that, the research of Moen, et al. (2014) [16] show that the athletes are satisfied with their coaches coach competencies and the results indicate a relationship between the athletes results and their perceptions of their coaches coach competencies.

Research of Chiu et al. (2013) [6] stated competent coach showed different approach and style in giving motivation, strategy, game technique, and building character of athlete. The different approach and style will impact the training results. Santos (2010) [23] studied about competence, professional experiences, and academic of the coach. Research of Santos done to 343 coaches in various sport branches by answering questionnaires prepared by the researcher, the results showed that coach majority have competencies but still need training.

Coach activity in doing his activities can be known and observed easily by everyone, as stated by Barney (2013) [1] Coaching is a very visible profession, to the point that a coach’s every move is scrutinized. Because of that, football coach should be professional and competent in this field (sets of knowledge, skills, attitudes, and personal Characteristics) (Klooster and Roemers, 2011) [10]. While Côté and Gilbert (2009) [7], coach development elements based on three things: experience as athlete, experience in coaching, and has formal or informal education.

A coach get coaching experiences that come from his previous coach. The leadership style of a coach will become inspiration for his athlete when in the future become a coach. The coaching experience like a flight hour for pilot. He will get direct experience and how to solve the occurred problems. Formal or informal education can be used as foundation to implement the coaching principles. Coach development elements given in figure 1.1 below.

![Fig 1.1: Element of Coaching Development (Côté and Gilbert, 2009) [7](image)](image)

**1.2 Competencies Standard**

Related with the competency of sport coach, NASPE (National Association for Sport and Physical Education) has made 8 standard domains for coach competency: (1) Philosophy and Ethics; (2) Safety and Injury; (3) Prevention Physical Conditioning; (4) Growth and Development; (5) Teaching and Communication; (6) Sport Skills and Tactics; (7) Organization and Administration; (8) Evaluation (NASPE, 2005) [19]. The eight standard domains made by NASPE explained become 40 standard competencies.

National Christian Collegiate Athletic Association (NCCAA) there are 4 categories in assessing the coach competencies: (1) Character Building Competency (CBC), (2) Game Strategy Competency (GSC), (3) Motivation Competency (MC) (4) Technique Competency (TC) (Philips, Jubenville, 2009) [21]. Beside that, Moen and Fikse (2011) [15] grouped the coach competencies become six competencies groups: communication, leadership, pedagogy, sport specific, team building, and X-factor) X factor according to Moen more on personal quality of the coach or character such as: honest in each activity, become positive energy for team, act as motivator and inspirational for the athletes.

Research of Myers et al. (2006) [18] stated coach competencies were grouped into four dimensions called by Coaching Competency Scale (CCS). The four dimension including: Motivation, game strategy, techniques, and Character building.

**Fig 1.1: Element of Coaching Development (Côté and Gilbert, 2009) [7]**

Definition of 4 coach competencies can be summarized in table 1.1 below.
forms of extrinsic motivation (Vallerand and Losier, 1999) [25].

1.3 Motivation Dimension

Motivation is one of factors that make someone want to do work, although difficult. A coach and athlete ready to do routing exercise, through injury risk, and keep themselves to do exercise to reach achievement.

There are two motivation, Intrinsic and Extrinsic. Intrinsicly: this is the incentive inside someone that pushes them to do things. We see intrinsic motivation to be more important than extrinsic as it does not need an outside source to excite it. Extrinsically: an external force that makes an athlete want to better themselves Coaches, family, friends, media, social life, rewards, money, events, outcomes are all

Motivating is ability that diffic ult to understand, and a trans action tool by coach that is used to help athlete to reach maximum potentials (Frost, 2013). Motivation model between coach and athlete as given in table 1.2 showed that coach need to know and understand the athletes, and vice versa. Motivation is important part of athlete success in sport, it build hypothesis that used to depict the intrinsic and extrinsic power that direct to initiation, direction, intensity and perseverance of the doer (Vallerand, 2003).

Table 1.1: Definition of Four Dimensions of Coaches’ Coaching Competency

<table>
<thead>
<tr>
<th>No</th>
<th>Dimension of competency</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Motivation</td>
<td>Coaches’ ability to affect mood psychology and skills of athletes.</td>
</tr>
<tr>
<td>22</td>
<td>Game strategy</td>
<td>Coaches’ ability to lead athletes during competition.</td>
</tr>
<tr>
<td>33</td>
<td>Techniques</td>
<td>Coaches’ ability to make some diagnostics and giving instructions to athletes.</td>
</tr>
<tr>
<td>44</td>
<td>Character building</td>
<td>Coaches’ ability to influence athletes’ personal development and positive attitude towards sports.</td>
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</table>

(Source: Myers et al., 2006) [18]

Fig 1.2: The Motivational Model of the Coach-Athlete Relationship (Vallerand, 2003).

Intrinsic motivation power make the fighting spirit of the athlete become high, work hard ethos in training, until he defeat his opponent. If a coach able to create conductive environment, then the athlete will be more motivated to train with high spirit.

Motivation can be observed both objectively and subjectively. Subjectively we can look at a players’ motivation by seeing if they are pushing themselves at training and being enthusiastic about their sport. If they are enjoying what they are doing, then they will become more motivated (Blanchard, Amiot et al., 2009) [3]. It means if athletes do their training with happiness, spirit, and seriously they showed there is motivation.

Objectively, motivation can be measured using the Sport Motivation Scale (SMS). The SMS consists of seven subscales that measure 4 types of extrinsic motivation and 3 types of intrinsic motivation (Pelletier, Fortier et al., 1995) [20]. At other side, positive and negative feedback from the coach also play large roles on the athlete’s motivation. Positive feedback was reported to generally increase motivation whereas negative feedback was found to decrease motivation (Keegan, Harwood, et al., 2009) [9]. Each athlete should has big will to win a competition. It is suitable with the opinion of Posner (2013) [12] that Passion was found to be useful and important in helping an athlete focus and persist with the effort required to achieve excellence throughout the ups and downs of years of competition.

Dimension of playing strategy competency, the coach strategy in instructing the athletes to attack or defend in certain round. It needs art and science from the coach. Technical competency is the coach competency toward football technique that can be implemented to athlete, it is better if the coach is former player. He will master various football technique just like when he was player. Character building competency is competence to build character of athlete, so have good character, playing sportively, fair play and respect to the opponent. Lutan (2001) [13] explained that fair play easy to say, but difficult to practice, not only in sport but in various daily activity. While values investigation in character building in Indonesia know four pillars, that is heart management, thought management, exercise and initiative management, the four pillars contain elements of honest, intelligent, agile, and care (Muthohir, 2010) [17]. Coaches also have good character so able to build good character also. According to Winarno (2012) [26] character can be formed in three stages (1) knowing, (2) acting, and (3) habit. The three is one series of activities, not separated piece, so the character learning should be done in three stages. Suitable with the opinion of Basuki (2011) [2] character education should build concept of habit of the mind, habit of the heart, and habit of the hands, or able to equalize the thought, feeling and action.

2. Research Method

The research used Research and Development Method that refer to Borg & Gall (2003) with procedural model and theoretical and empirical development approach. The model combine the framework based on the relevant theories and supported with empirical data. The development stages including (a) preliminary study (b) product development (c) dissemination and implementation of product. Each stage can be explained as: product development included: product design, expert validation, product revision, and product trial in wide group. Trial subjects is FS coaches in Malang City (n=50). Product dissemination subject at wide group is all coaches of FS in Great Malang (n=80, N=396), FS committee (n=30, N=132), athlete-student of 10-15 years old (n=400, N=3300).
2.1 Development Procedure

Instrument development is begun with the item pool through empirical and theoretical investigation. Empirical investigation by interview and NGT (Nominal Group Technique) to 14 FS coaches of Malang city. Each participant was asked to write their opinion relate to competency of the FS coach, the opinion will be valued by each group member to determine the relevant instrument element. At the empirical investigation produced 55 instrument items, while at theoretical investigation produced 40 instrument items, entirely there are 95 items of instrument candidate. Then the screening of item pool by Q-sort technique to reduce the irrelevant items. Through Q-sort obtained 71 instrument items, and then tried to the FS coaches (n=50). The trial results were factor analyzed to know the reliability and validity of instrument.

Below is the CCI-FS development stage diagram in figure 1.1.

![Diagram of CCI-FS Development Stages](image)

Fig 1.3: Diagram of CCI-FS Development Stages

3. Results & Discussion

Development results of coach competency evaluation instrument of football school obtained 33 evaluation instruments items that formed five competency dimension: communication, leadership, coaching, sport specific (branching), and character. Validity (Corrected item-total correlation) with score range of 0.296 - 0.575, and CCI-FS reliability with cronbach’s alpha of 0.919.

The coach competency evaluation instrument of Football School (CCI-FS) was developed and arranged based on the relevant empirical facts and empirical theories. The empirical facts come from the coaching experiences of the FS in Great Malang. The theoretical investigations come from the sport coach competencies theories and the relevant research journals. The instrument development based on the empirical facts and the theoretical investigation have fulfilled the external and internal validity. It is similar with Sugiono (2013) that instrument which has external validity if the instrument criteria are arranged based on empirical facts, while the external validity was developed according to the relevant theories.

Items of coach competencies instrument that come from empirical facts and theoretical investigation found 95 competency items, then consulted and validated by expert, trialed, and factor analyzed that finally produced 33 competences items for FS coach called by CCI-FS. The CCI-FS consist of 33 statements and questionnaire that have sufficient validity, because the Corrected Item-Total Correlation in the range of 0.296-0.600 p=0.00. While the reliability test results obtained cronbach alpha of 0.919>0.6 so can be said that the statement items in the questionnaire has high internal consistency.

The criteria as stated by Litwin (1995), if the reliability coefficient of 0.70 or more can be accepted as good reliability. The fulfillment of validity and reliability test, then the CCI-FS can be used as instrument to evaluate the coach competency of FS validly and reliably. It means the CCI development results have high reliability as the requirement for instrument has been fulfilled (Sugiono, 2013). Items of CCI-FS in the form of questionnaire items that should be filled by coach as the recognition form done during coaching. The statement questionnaires were given quality and quantity score. The score in the form of statement: always (score 5), often (score 4), sometimes (score 3), seldom (score 2), and never (score 1). If CCI-FS is filled by coaches, then served as self-evaluation, if filled by headcoach, and FS students served as external evaluation. To know the FS coach competency in the research, the coach were by three elements, elements from headcoach, FS students, and FS coach himself. Evaluation from three elements is a form of cross test, the scores are summed then taken the average, and consulted with competencies category table. It made the coach competency evaluation results become objective.

4. Conclusion

Coach competency evaluation instrument of football school (CCI-FS) developed logically and empirically can be used to measure the coach competencies of FS validly and reliably. CCI-FS consist of 33 competency items that formed five dimensions, communication, leadership, coaching, branching, and character. CCI-FS can be used to measure and map the competence profile of FS coaches in Great Malang.

5. Suggestions

CCI-FS product from the development results can be used by coaches, head coaches, or management of FS to measure the coaches competency, and the results can be used as foundation to improve the coaches competency. It needs further research in effort to test the validity and reliability with different samples with larger area. CCI-FS product from this development can disseminated to evaluate the FS coaches in large.

6. References

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