# COMPETENCIES OF SERBIAN YOUTH FOOTBALL COACHES

Voja Milosavljević1\*, Željko Rajković2, Dragan Perišić1

<sup>1</sup>Football Academy, Belgrade, Serbia, e-mail: <u>vojavojam@yahoo.com</u>, <u>dragan.perisic58@gmail.com</u> <sup>2</sup>Faculty of Sport and Physical Education, University of Belgrade, Serbia e-mail: <u>rajkoviczeljko@yahoo.com</u>

Abstract: Although there is an organized training system for coaches in the Football Association of Serbia (FAS), their careers are governed to a much greater extent by the merciless market, which forms a unique combination of the influence of the environment, age, previous competitive experience and level of success, as well as coaching experience. For the stated reason, the FAS Youth Commission, which takes care of the future of Serbian football, launched a survey on the professional profile of youth football coaches in Serbia. The analysis includes the work of 161 coaches of youth schools in the Super League, the First League and the Serbian League. Most coaches come from Western Serbia, followed by Belgrade, then Eastern Serbia, with Vojvodina at the back. The age structure of the coaches seems to meet the current needs of the Association. The coaching assotiation are also satisfying with a high percentage of licensed coaches. The coach's previous playing experience is also satisfactory. A relatively small number of coaches have playing experience at the highest level. The guestion arises whether the structure of the average coaching tenure is sufficient for the results that are set as goals for the FAS? A small number of trainers worked with only one age group, while the largest number of trainers worked with 4 ages between 10 and 18 years old. Half of the coaches tried their hand at the senior competition. A seemingly simple analysis raises questions that mostly concern the unused resource for the advancement of the FAS, and which are precisely found in the strategic approach to the development of football personnel and the systematic management of the aforementioned variables, which, with the correct relationship, sequence and combination, can lead to more experienced and successful football experts in Serbia. Based on the results, FAS will launch a joint development program for youth.

**Keywords:** age, education, sports experience, coaching experience **Field:** Social Sciences, and Humanities.

### **1. INTRODUCTION**

Sport is a global phenomenon, an integral part of human culture, and a complex educational activity that includes people of different ages (Računica, 2020). The development of sports talent takes place in optimal conditions with the support of scientific knowledge, but the coach's broad and deep pedagogical knowledge is a decisive factor for the success of a complex, systematic and long-term process (Gombocz, 2004; Déri, 2015).

It is customary to cite the Latin word competentia as the origin of the term competence, which has several meanings and is used in economics, psychology, sociology, pedagogy, technology and numerous other activities. This complex concept with diverse meanings is difficult to define in one sentence (Weinert, 2001; Računica, 2020).

Personal competencies, such as self-awareness, self-regulation and motivation, contribute to a person's fulfillment on an individual level. Numerous social competences (empathy; social skills) enable successful functioning in a group. Personal and social competencies are integral parts of emotional intelligence, which plays a key role in achieving success at work (Weinert, 2001; Suleić, 2020).

Supporters of the behaviorist approach look at man through the prism of objective and measurable behavior. For them, competence is an individual's outcome-oriented skills and is reflected in the actions performed to complete a task. This approach implies the existence of specific competencies, the number of which increases with increasing complexity of tasks. Eight key competencies for lifelong education are cited as an example of a behavioral approach (Catić, 2012).

The constructivist approach emphasizes that, in interaction with the world, an active person forms a model from which he removes everything that is not important for the achievement of the goal in the given conditions. In the process of gaining experience, in which three variables (people, goals and context) are involved, the following are built: understanding, knowledge, skills and abilities (Catić, 2012). The quality of the resulting construction largely depends on the total previous knowledge and on the successful creation of new ideas. In the clash of old and new ideas, personal beliefs are changed or new information is rejected, and in this way, the learning process is completed.

After a systematic analysis of the existing theoretical and conceptual approaches to competences,

<sup>\*</sup>Corresponding author: vojavojam@yahoo.com



<sup>© 2024</sup> by the authors. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

Letina (2015) states the basic dimensions of the concept of competence according to the understanding of the Council for Education in the Netherlands from 2002. These are: (1) specificity - which refers to abilities manifested in a certain context; (2) integration - which consists of sets of knowledge, skills, attitudes and personal qualities, necessary for active problem solving and (3) persistence - which can be developed from a lower to a higher degree. Important but not necessary competencies are: (4) activity - includes the ability to act; (5) developability - competence can be acquired and further developed and (6) interdependence - means that some competences are needed for the development of other competences.

Letina (2015) summarizes criticisms of competency models of education into three groups. The first group consists of a vague concept of the term competence, a way of achieving results, a weak incentive for critical thinking, and a poor formulation of goals. Since competences cannot be taught, but only acquired, didactics is reduced to methodology. The second set refers to the neglect of basic and specific knowledge, the absence of a solid connection between theory and practice, and the neglect of general education. The third group of criticisms talks about the unclear criteria and way of evaluating acquired competences and neglecting the context.

Everything previously said in relation to the concept of competence is applicable to the concept of competence of football coaches (Računica, 2020). Successful youth coaches need to know the football game from different aspects, to know the developmental characteristics of the players they work with, to plan, organize and lead the training process, to provide a favorable physical, emotional and cognitive working environment, to monitor the achievement of the players they train, to encourage team spirit, to develop the ability to solve problems, to communicate with the administration, parents and the media, with the aim of integral development of the players and their competencies. The set of coaching knowledge and skills can be divided into (1) knowledge about the profession (knowledge about sports, training theory), (2) knowledge about oneself (self-awareness, personal philosophy), (3) knowledge about others (group relations, leadership).

When asked about important coaching skills, the European Observatory for Sport and Employment received two sets of responses from sports employers (Evropska komisija (2020) In the first group, the most important skills of coaches are singled out: (1) specific sports knowledge and skills, (2) giving clear instructions. (3) ensuring the health and safety of athletes, (4) planning training and programs, (5) the ability to work in accordance with ethical codes. In the second group are the skills that the trainers do not have enough control over: (1) working with disabled people, (2) information and communication skills, (3) marketing and sales skills. (4) organizing activities and events, (5) working with different participants.

The coach instills in the players socially desirable values (honesty, equality, discipline, persistence, respect) as life landmarks that he himself strives for. These are beliefs that something is important, useful and that some forms of behavior are good and some are bad. A greater number of values make up a value system, which is built by repressing appropriate forms of behavior into the subconscious. A sports coach has a positive effect on the acquisition of skills that can be transferred to solving a large number of situations. It is not possible to enumerate the total number of transferable skills, but communication and cooperation skills, analytical skills, technical skills, organizational skills, and personal skills are highlighted.

The work practice of football coaches today in Serbia is marked by the expectation of successful results against the cruel market of their careers, as well as the absence of a long-term development plan for football coaches.

Although there are systems for long-term planning of sports careers (Ropret & Jevtić, 2019) for certain sports, there is still a lack of a similar development plan for sports coaches, including football experts. Citing the success factors of soccer coaches such as environment, age, license level, level of former playing quality, level of former competitive experience, coaching level and coaching experience, one can ask about the ideal formula for creating a high quality soccer coach.

The problem of this paper is the question to what extent the structure and mutual relationship of different forms of education and pedagogical experience of coaches contributes to the acquisition of appropriate competence for working with young football players.

## 2. RESULTS

Survey participants work in youth schools of clubs in 4 regions. As much as 40% of the total number of surveyed coaches comes from Western Serbia, which is expected given that this is the region with the largest number of clubs (1207 clubs), for which 36027 players are registered. The Belgrade coaches follow with 24%, although the Belgrade association consists of only 277 clubs. Eastern Serbia is represented by 22% of the surveyed coaches, and Vojvodina is at the bottom with 14% of coaches. The

age structure of the coaches, among whom 9% are under 30 years old, 39% between 31 and 40 years old, 33% between 41 and 50 years old, 15% between 51 and 60 years old and 4% over 60 years old, meets the needs of the Association. Although the above data may seem superfluous, a serious Federation must work on the even development of football and football experts throughout the territory of the home country, where after persistent and detailed monitoring of the age structure, interventions can follow.

The above data raises some questions such as: Where is the future best youth football coach in Serbia hiding? What are the peak years of his career? At what age should he decide on a coaching call and start working?

Since a large number of coaches obtained their education and work licenses before the agreement with the international federation on the licensing of coaches, the old nomenclature of sports occupations and titles was used in the survey. Almost 4% of coaches did not answer the question about having a work license, and 3% of coaches have the title of football teacher, which they did not translate into a suitable, new title. 47% of respondents are coaches with a football license and coaches with a college or university degree. Previous competitive experience is satisfactory because 63% of coaches have been actively played football for over 15 years. They are followed by 19% of coaches with experience as a player between 11 and 15 years, 12% of coaches played at the amateur level, 32% were professional footballers, 14% had an international career, 6% played for the national team and only 3% were players of the highest class - participants World Cup, European Championship, Champions League.

New questions is: is a higher ranking of one's own competitive experience always better for a future coach?

The analysis of the coaching experience of the interviewed coaches causes multiplication and branching of new questions. Is the structure of the average coaching experience up to 10 years for 52% of coaches, between 11 and 15 years for 25% of coaches, 16-20 years for 11% of coaches and over 20 years for only 12% of coaches, sufficient for the results that are considered as goals place in front of FAS?

When asked what class the players with whom they worked in the youth ages reached in senior football, the coaches could circle several answers. Therefore, the sum of frequencies exceeds the total number of interviewed coaches. If we start from the sum of all answers, about 60% of coaches worked with players who continued their senior career at the amateur level. 46% of coaches worked with future professionals, and around 22% of coaches worked with future internationals. 27% of coaches worked with players who played for one of the national teams. Only 11% of coaches worked with players who reached the highest level, which includes appearances in the Champions League, Europa League or the World and European Championships.

Again, seemingly mundane questions follow, such as: What is the sequence, duration and combination of quality categories of football players ideal for the development of coaching quality?

The high age differentiation of the football game system led to the fact that only 15% of coaches worked with only one age category, while the largest number of coaches worked with 4 ages between 10 and 18 years old. Out of the total number, about 45% of coaches have tried their hand at senior competition.

Again, questions can be asked such as: Is it better to specialize a coach for one age or will he mature better by following one generation from its beginning to its end?

A seemingly simple analysis raises questions that mostly concern the unused resource for the advancement of football in Serbia, and which are precisely found in the strategic approach to the development of football personnel and the systematic management of the aforementioned variables.

#### 3. DISCUSSION

The Football Association of Serbia has 3,087 football clubs registered in its records, which are organized in 365 leagues, with 110,339 registered players. The complex system of football organization in Serbia is supported by 4032 football referees, 102 municipal, 17 district, 8 territorial, 5 city and 5 regional football associations, as well as 4091 registered football coaches.

Professional training for the performance of certain jobs in sports is carried out within four levels of professional training (SI. glasnik RS, br. 60/2020). The condition for acquiring the first level of competence is training lasting 120 hours with previously completed, at least, secondary education. The second level is obtained after 240 hours of training and after previously completed, at least, secondary education. The condition for obtaining the third level is 360 hours of training and completed, at least, secondary education, or completed the appropriate second level of professional training. Candidates who successfully complete the 360-hour training after the acquired third level, acquire the fourth level. This level makes it possible to

perform training activities with children in sports (children are persons under the age of 16).

Coache's education plan for working with children must contain teaching content from the following areas: children's anthropomotor skills, children's health education, physiology of children's sports, motor control, pedagogy in children's sports, psychology of children in sports, methodology in working with children and protection of children's rights in sports. In addition to basic and special professional qualifications, professional-educational work with children can be performed by sports experts who have appropriate higher or higher education in the field of physical education and sports (SI. glasnik RS, br. 10/2016).

Accredited higher education institution for coaching education showed that the teaching content is planned for a period of three years of education with a total of 1800 hours in which general education subjects, general specialist subjects, professional subjects and specialized subjects are studied. In addition to fulfilling the legal requirements, coaches should possess an international UEFA diploma/license to work, which is acquired through training organized by the FAS. The fulfillment of such double conditions was resolved by the Agreement between the FAS and higher education institutions on cooperation in the training of coaches.

Based on the Regulations on the work of the Center for the Education of Football Coaches of the Serbian Football Federation dated 7/24/2020, in 2-3 years he can master the program and acquire the highest level of training for working with youth, the UEFAA Elite Youth diploma/license, with a total of 360 hours. There is an obvious difference in the number of hours between the professional studies program and the courses for football coaches organized by FAS. If we assume that in the period between the two license courses, the trainer works in the club and thereby makes up for the difference in the amount of practical lessons that the students have, we are left to believe that the course participants are deprived of a large number of lessons in general education and general professional topics that the students listen to.

Candidates who hold UEFAA diplomas/licenses and who have successfully managed football teams of a certain level of competition in the stipulated period of time can apply for the training competition for UEFA PRO diplomas/licences. Admitted candidates with a professional-international playing career, upon successful completion of the course, directly receive a UEFA PRO diploma/license. Candidate coaches, without a professional-international playing career, upon completion of the course, receive an FAS PRO certificate/license, which enables them to work in the professional leagues of the FAS in the function of head of the professional staff, and if they fulfill this condition for 1 (one) year, they can apply for UEFA PRO diploma/license, according to the plan and program of the FAS. The impression is that the playing career is valued more than the competences acquired through years of gradual coaching practice.

Kuljić, Čokorilo and Grk (2010) point to the expressed need for coaches to learn through their experience and to network locally and regionally in order to exchange examples of good practice. Coaches do not attach much importance to formal education for career development. The authors believe that action research, with the task of reflecting and systematizing one's own and other people's experience, would provide an opportunity to raise the competencies of trainers to a higher level.

In addition to international UEFA diplomas/licenses, FAS organizes courses for obtaining national coaching certificates/licenses that cannot be certified in other UEFA members: D-license, PRO-license, license for physical preparation, for futsal (FL), for goalkeepers and for sports management of the PRO club.

Upon completion of professional/academic studies, a national D-license intended for working with children up to 10 years of age can be obtained, subject to certain conditions.

It is an interesting condition for enrolling in the course for physical training coaches, which equates candidates with completed academic/professional studies to candidates who do not have a higher education, but only a UEFA A license. Candidates accepted according to one of these criteria attend a course of 60 hours, which is implemented according to the FSS plan. It can be said that candidates with higher education degrees are at an advantage in this coaching profession due to the much larger pool of content they have mastered during their studies.

Acquiring the necessary competencies raises the level of self-esteem and satisfaction in the role of coach, which has a positive educational impact on athletes and the prosperity of football. The most common sources of pedagogical education are faculties, pedagogical-psychological literature and practical experience (Kuljić, Čokorilo & Grk, 2010).

The law on sports starts from sports ethics as a way of thinking and behaving on the issue of cheating, compliance with rules, doping, abuse, trafficking in young athletes, corruption and expressly prohibits the exposure of children to sports activities and physical exercises that can endanger or worsen their health condition or negatively affect psychosocial and motor development or education (SI. Glasnik RS, br. 10/2016).

General ethical issues of children's and youth sports refer to the line of transition into unacceptable behavior of coaches, to strict selection conditions, to an insufficient or excessive number of competitions, to competition conditions appropriate to age and abilities, to premature specialization (Deno, at al., 2021). We are contemporaries of the fact that in Serbia the age limit for children who join football clubs and participate in competitions has moved below 6 years.

Special attention in the training of coaches should be focused on preventing acute and chronic injuries of children and young athletes. In doing so, we are not only referring to treating physical injuries, but also to potential injuries that are often not visible. Išpanović - Radojković (2012) emphasizes that real injury occurs when a child suffers physical, cognitive, emotional and/or developmental damage. Potential injury refers to repeated exposure to the risk of injury, when there is no supervision or appropriate protection in an inappropriate environment.

The most common form of covert physical abuse takes place under the pretext that a football player needs to "harden" himself physically and mentally with a heavy workload. The coach's motto "who survives will succeed" is supported by a large number of parents. The most common consequence of such an approach is the occurrence of overexertion syndrome, which accounts for 30-50% of all sports injuries (lvković, at al., 2006). Thanks to the key rules of the game, that the ball must not be played with the hands and that it is forbidden to trip and knock down the opponent, football has clearly demarcated itself from rough play. Nevertheless, a large number of duels at full speed lead to acute injuries that are easily diagnosed and repaired with precise therapeutic treatment.

As a result of long-term exposure to training and competition loads that exceed the tissue's ability to recover, microtraumas occur on the musculoskeletal tissue that are difficult to detect in a timely manner. As a final result, after a number of years, tissue cracking occurs. Children are especially susceptible to damage to the epiphyseal growth plates, the ends of bones (epiphysis), the attachment of tendons to bones, cartilage and muscles, due to overexertion. This can be mitigated and prevented with optimal training methods and prevention and trainer education strategies. (Bank, at al., 2022).

More often than injury, there is neglect of children and young people characterized by irresponsible implementation of protection measures, denial of attention and creation of an unfavorable environment for development. Neglect is not always intentional and the line at which it begins is not obvious. Giving up playing sports is a sign that the physical, social, emotional, and/or cognitive sports environment does not suit the young athlete. Trbojević (2018) believes that giving up or striving for the professional status of an athlete is a multidimensional and complex process. One of the most important factors for determining one of these decisions is the existence or absence of a motivational climate for learning and enjoyment (Back, at al., 2022) created by the coach. Emotional abuse is the intentional, repetitive insulting, belittling and humiliating of athletes with the aim of establishing complete control over them, causing a sense of guilt and fear (Ríos, at al., 2022).

Abnormal forms of coach behavior can appear due to poor coping skills in situations such as result failure, threatened existence. Weak tolerance to frustration, fear that cannot be overcome, difficulties in adapting to people, are signs of neurotic disorders of trainers. If the defensive mechanisms that the coach unconsciously uses to get rid of insecurities and maintain self-confidence, become a regular way of responding to the coach, they become harmful to successful performance and make relationships with other people difficult (Rot, 1970). In a stressful situation, the coach finds reasons to show himself and others that he is not personally responsible for the failure, so he needs a victim. He chooses a weak individual on whom he can unleash his fury with an uncontrolled attack without consequence.

## 4. CONCLUSION

The path to the education of youth football coaches begins with the formation of a group of experts who will perform a comprehensive analysis of modern football, determine the trend of the game's development, and determine the ideal game model of a national team and the profile of the players needed for that. Based on this knowledge, goals should be determined, standards and expected outcomes of youth training should be defined, a plan and program of work with youth should be prepared based on a gradual increase in the workload and complexity of tasks, the type and number of games and on raising the quality of the game.

The development model for children and young football players (Милосављевић, 2012) contains: (1) developmental stages with indicative age limits, (2) main goals and tasks of training by stages of development, (3) dominant characteristics of the program by age with respect for individuality, (4) basic contents, methods and organizational forms of training, (5) quantitative ratio of different types of preparation by year, (6) indicative size of load by age with weekly and annual volume of training, (7)

indicative number and degree of competition, (8) expected outcomes and educational standards, criteria for control of progress and norms of ability for each age category.

At the same time, these are the areas and contents of the courses for youth football coaches who will implement the project on the field. Practical work requires coaches whose work is based on critical reflection and lifelong education, who focus on player development, but not only on the development of technical skills and correct tactical behavior. The complex pedagogical activity of coaches requires a broad and deep education with established educational standards on basic knowledge, skills and abilities that are analogous to the needs and contents of developmental models of children and young players.

Out of a large number of coaches in the territory of a country, one will always be declared the best, regardless of his level of quality. The harsh system of different individual paths in the development of football coaches, as well as frequent changes during their career, is not conducive to using the full potential of each individual coach. During that time, many coaches give up and change their profession, even though they may have been great talents for achieving significant results. All of the above does not contribute to the systemic improvement of the overall quality of football in any country.

The problem of the careers of youth football coaches could be viewed in the opposite way from the widespread common practice. The results of this research, in addition to the above, lead to several more general hypothetical questions, such as: Is it possible to create a plan for the long-term development and selection of coaches for national and individual football teams? Could a football player's career be used as a tool to create a coach, rather than the main goal? What is the optimal ratio of the period when the coach works in a developmental sense and uses all researched variables as a tool in relation to the period when he is interested in the pure result?

The mentioned way of thinking could represent a reserve and unused potential in the development of the football game in an individual, in a club, association or in general.

#### REFERENCES

- Back, J., Johnson, U., Svedberg, P., McCall, A., & Ivarsson, A., (2022). Drop-out from team sport among adolescents: A systematic review and meta-analysis of prospective studies, Psychology of Sport and Exercise, Volume 61, 2022, 102205, https://doi.org/10.1016/j.psychsport.2022.102205.
- Bank, N., Hecht, C., Karimi, A., El-Abtah, M., Huang, L., & Mistovich, R. (2022). Raising the young athlete: training and injury prevention strategies. Journal of the pediatric orthopaedic society of North America. 4. 1-13. DOI: 10.55275/ JPOSNA-2022-0037.
- Deno, E., Kritzeck, L., Romanski, S., & Strand, B. (2021). Early sport specialization: risks, avoidance, and college scholarships. 56. https://www.researchgate.net/publication/354727550.
- Déri, D. (2015). The pedagogue coach as a determinant factor of football talent development. Studia UBB Educatio Artis Gymn. LX, (60) 2, 85 94.
- Ćatić, I. (2012). Kompetencije i kompetencijski pristup obrazovanju. Pedagogijska istraživanja, 9 (1 2), 175 189.
- Evropska komisija (2020). Śmernice o minimalnim zahtevima u pogledu veština i kompetencija trenera. Glavna uprava za obrazovanje, mlade, sport i kulturu, Odeljenje C4 - Sport. Brisel.
- Gombocz, J. (2004). The pedagogical role of the physical education teacher and the coach. In Biróné N. E. (ed.), Sport pedagogy Budapest-Pécs: Dialog Campus.
- Išpanović Radojković, V. (2012) Zlostavljanje i zanemarivanje deteta. U Psihopatologija dece i mladih, odabrana poglavlja. Beograd: Fakultet sa medije i komunikacije, Departman za psihologiju. Univerzitet Singidunum.
- Ivković, A., Šmerdelj, M., Smoljanović, T., & Pećina, M. (2006). Nastanak i mogućnosti prevencije sindroma prenaprezanja, U Kondicijska priprema sportaša- 4. godišnja međunarodna konferencija (urednici: Jukić, I., Milanović, D., Šimek, Ś.) Zagreb: Kineziološki fakultet Sveučilišta u Zagrebu; Udruga kondicijskih trenera Hrvatske, 4 (31-39).
- Kuljić, R., Čokorilo, R., & Grk, M. (2010). Socio-professional status of coaches and subjective experience of pedagogical competence. In: Simović, S. (Ed.), 2nd International Scientific Conference, Banja Luka: Faculty of physical education and sports.
- Letina, A. (2015). Mogućnosti i izazovi odgoja i obrazovanja usmjerenog prema razvoju učeničkih kompetencija. Pedagogijska istraživanja, 12(1 – 2), 103 – 116.
- Милосављевић, В. (2012). Фудбал за децу и младе 1. Вишегодишњи прогресивни модел обуке фудбалера. ФСС и аутор. Београд.
- Računica, L. (2020). Pedagoška kompetencija trenera. Završni rad. Split: Sveučilište u Splitu, Filozofski fakultet, Pedagogija i anglistika (nastavnički smjer), odsek za pedagogiju.
- Ríos, X., Ventura, C., Lleixà, T., Prat, M., & Flores, Ğ., (2022). Prevalence of bullying in grassroots soccer in spain: victims, bullies, and bystanders. Physical Culture and Sport. Studies and Research, vol.94, no.1, 2022, pp.11-20. https://doi. org/10.2478/pcssr-2022-0002. Ropret, R., & Jevtić, B. (2019). Long term athlete development, from theoretical and practical model to cognitive problem,
- Physical Culture, Vol. 73, 2, (190-205). doi:10.5937/fizkul1902190R
- Rot, N. (1970). Opšta psihologija. Beograd: Zavod za izdavanje udžbenika SR Srbije.
- Službeni glasnik RS (2016) Zakon o sportu br. 10. Beograd.
- Službeni glasnik RS (2020) Pravilnik o stručnom osposobljavanju i usavršavanju za obavljanje određenih stručnih poslova u sportu, broj 60. Beograd.
- Šuleić, J. (2020). Kognitivne i nekognitivne veštine u funkciji utvrđivanja produktivnih performansi zaposlenih u hotelijerstvu.

Doktorska disertacija. Beograd: Univerzitet Singidunum. Fakultet za turistički i hotelijerski menadžment.

Trbojević, J. (2018). Socio-psihološki prediktori odustajanja od sporta u adolescenciji. Doktorska disertacija. Novi Sad: Univerzitet u Novom Sadu, Filozofski fakultet odsek za psihologiju.

Weinert, F. E. (2001). Concept of competence: A conceptual clarification. In D. S. Rychen & L. H. Salganik (Eds.), Defining and selecting key competencies (pp. 45–65). Hogrefe & Huber Publishers.