

Article

# Relationship between Perceived Teamwork Effectiveness and Team Performance in Banking Sector of Serbia

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Received: 29 September 2020; Accepted: 14 October 2020; Published: 21 October 2020



**Abstract:** Teamwork is one of the most important factors for business success in the modern economy. In almost every area of business, teams receive more and more attention, since it has been found that teamwork leads to greater individual, group, and even organizational performance. The aim of this research is to investigate the effectiveness of teamwork and its relationship with team performances. Specifically, the authors tried to investigate which factors of teamwork effectiveness have a positive relationship with teamwork performance and the sustainability of teams in the future. The subject of the research is the effectiveness of teamwork as a construct that is widely presented in the scientific field of organizational behavior and human resource management, but is still underexplored in empirical research, especially in the banking sector. An investigation with a self-audit questionnaire on teamwork effectiveness was conducted on a sample of 401 employees in the banking sector in Serbia, in 16 out of the 26 existing banks in the country. The authors used SmartPLS software in order to test the questionnaire (indicator loadings, internal consistency reliability, convergent validity, and discriminant validity) and proposed research question (PLS-SEM). The results showed that factors such as innovative behavior of the team members, the quality of teamwork, and teamwork synergy have positive relations to teamwork performance. This paper contributes to the better understanding of the factors of teamwork effectiveness that contribute to team performances, with respect to the banking industry in Serbia. The limitation of the paper is the size of the sample, with respect to the total population.

**Keywords:** team; effectiveness; team performances; sustainability; banking industry

## 1. Introduction

Teamwork is a vital aspect of the functioning of any organization. Teams, as a basic structural component of an organizations' design, should contribute to a more efficient and improved business performance of the organization. Improperly structured and led teams can make it impossible for an organization to work and develop; this is why it is necessary to know the nature and characteristics of the teams in order to achieve their goals. Another highly important issue is the level of team effectiveness, which should answer the question of whether or not a given team is capable of achieving its goals and performances [1,2]. This is essential, especially given that more and more business processes are performed by teams and not by individuals [1–3], and that the sustainability of organizations and corporate performances are positively related to successful teamwork [4,5].

Teamwork is a process in which team members, using their individual knowledge, experience and skills through dynamic interaction with other team members, seek to achieve the common goals of the organization, and thus achieve a synergistic effect. According to Driskell et al., “teamwork

is the process through which team members collaborate to achieve task goals. Teamwork refers to the activities through which team inputs translate into team outputs, such as team effectiveness and satisfaction" [6] (p. 334). Yang [7] stated that "teamwork behavior is considered an effective way to create synergy in work teams. A team can achieve effectiveness by creating team synergy through the mechanism of process gain and loss. Teams can maximize process gain and minimize process loss to maintain high levels of teamwork through members' cooperation with colleagues, volunteering for tasks that go beyond their formal work requirements, and exhibiting helping behaviors toward others" (p. 4).

Today, numerous managers in organizations encourage teamwork in performing the tasks of employees, so as to improve their knowledge and improve their professional skills. Teamwork allows employees to collaborate, improve individual skills, and provide feedback without any conflict with other team members. Teamwork is a crucial strategy for the organization's business, because team members upgrade their skills, knowledge and abilities by working in teams, and this affects the performance and efficiency of the organization [8].

Organizations today concentrate on teamwork to provide a competitive advantage, solve problems through collaboration, and encourage employee creativity [9]. Teams can offer greater adaptability, productivity, and creativity, and they also offer more complex, innovative, and comprehensive solutions for organizational problems [10]. Therefore, teamwork is one of the most important issues in contemporary business.

The current state of research in the area of teamwork is broadly explored, but still there is little evidence on teamwork's effectiveness and its relations to teamwork outputs. Most researchers investigated the factors and characteristics that determine teamwork [11,12], like social skills, personality characteristics, knowledge capacities, and organizational structure. Some researchers stated that it was easier to suggest rather than to create an effective team [6]. There is a gap in the research of the effectiveness of teamwork, especially in developing countries. This is a crucial topic in organizational behavior because 'effective teams' actually refers to the team's viability, i.e., their "capacity for growth and sustainability required for success in future performance episodes" [13] (p. 12), [14]. According to Bell and Marentette [14], modern organizations need teams that will exist for a longer period of time, manage bundles of activities, not just one specific task or project, and that will be dynamic systems. That is why it is important to more deeply explore the effectiveness of teamwork.

The aim of this research is to investigate the effectiveness of teamwork and its relationship to team performances. Specifically, the authors tried to investigate which factors of teamwork effectiveness have a positive relation to teamwork performance and the sustainability of teams in the future. The subject of the research is the effectiveness of teamwork as a construct that is widely presented in the scientific field of organizational behavior and human resource management, but still underexplored in empirical research, especially in the banking sector. This paper contributes to the better understanding of the factors of teamwork effectiveness that promote team performances, with respect to banking industry.

The paper consists of four parts. The first part of the paper is dedicated to the presentation of the theory on teamwork effectiveness. In the second part, the authors present their research methodology and the sample. In the third part, the research results and the discussion are presented, and in the final, fourth part, the main conclusions, implications and research limitations are given.

## 2. Theoretical Background

### 2.1. Understanding Teamwork Effectiveness

Teams can be understood as "dynamic systems evolving in response to their environment" [15]. According to Bommer et al., "teams exist to perform tasks, and performance is the most widely studied criterion variable in the organizational behavior and human resource management literatures" [16] (p. 587). Regarding performances, teamwork effectiveness is one of the most important fields, since it is recognized that more effective teams lead to higher team performances, innovativeness, and sustainability [17–19].

One of the well-known approaches for understanding team effectiveness models was given by McGrath, who proposed an input–process–outcome (I-P-O) framework for studying team effectiveness [20,21]: “Inputs are factors that enable and constrain members’ interactions like competencies, personalities, task structure, external leader influences, organizational design features, and environmental complexity. Processes describe how team inputs are transformed into outcomes. Outcomes are the results of team activity that are valued by one or more constituencies that may include performance (e.g., quality and quantity) and members’ affective reactions (e.g., satisfaction, commitment, viability)” [17]. For years, there have been several adaptations of the model, and today it is seen as one of the starting points in understanding team effectiveness. The basic I-P-O framework is given in Figure 1. It is evident that the I-P-O model suggests linear relationships between constructs, and is presented as typical business model.

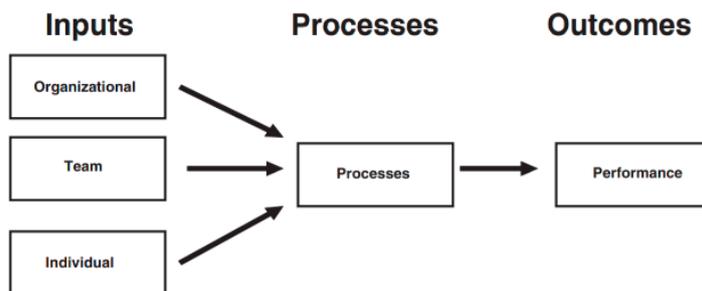


Figure 1. Input–process–outcome (I-P-O) framework for team effectiveness. Source: [17] (p. 413).

Apart from I-P-O, there is another significant model, which started out as a criticism of the I-P-O model: the input moderator outcome (IMO) model. This second framework included time and distinguished among multiple types of processes and outcomes in teamwork [22]. Actually, the authors of the IMO models showed that, in the case of P—processes, “many of the mediational factors that intervene and transmit the influence of inputs to outcomes are not processes, but emergent cognitive or affective states”, that the “I-P-O framework limits research by implying a single-cycle linear path from inputs through outcomes”, and that the I-P-O framework “tends to suggest a linear progression of main effect influences proceeding from one category to the next” [23] (p. 520), without considering emergent states that develop during team existence and have an impact on team outcomes. The IMO model is currently widely accepted in the team management literature [24]. The improved framework for understanding teamwork is presented in Figure 2.

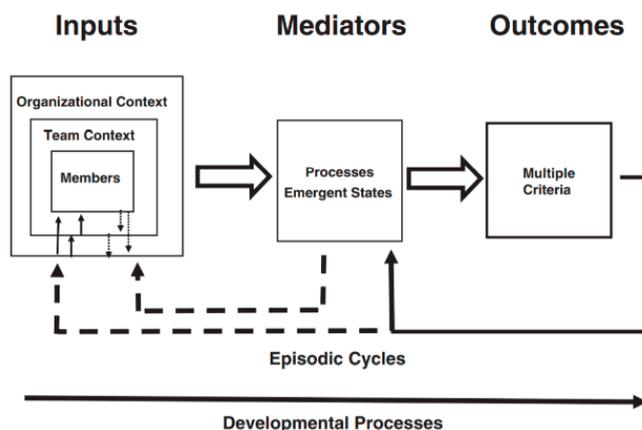


Figure 2. I-M-O framework for team effectiveness. Source: [17] (p. 413).

For understanding many of the potential constructs and variables that can be included in the IMO models, author Urlych [24] presented a framework for assessing teamwork effectiveness, presented in

Figure 3. From Figure 3, it is obvious that many different relations need to be included in exploring teamwork effectiveness. In the case of the input area, the organizational/contextual level may consist of the HR system, organizational climate and organizational culture. This level of input is important to bear in mind because “teams operate in an organizational context that either facilitates or hinders its functioning, and the team itself has to be treated as the primary level of analysis” [24] (p. 99).

Inputs	Mediators		Outcomes
	team processes	emergent states	
Team composition level – Personality – Competencies – Other attributes – Diversity factors (demography, functional, attitudes/values) – Complex combinations	– Transition processes – Action – Interpersonal – Others	– Team confidence – Empowerment – Team climate – Cohesion – Trust – Collective cognition	Organisational-level performance  Team performance behaviours
Team level – Interdependence – Technology / virtuality – Team training – Team leadership – Team structure	Blended mediators – Team learning – Behavioural integration – Transitive memory		Role-based performance  Performance composite
Organisational / contextual level			

Figure 3. I-M-O framework and team outcomes. Source: [24] (p. 98).

After presenting the main views on teamwork frameworks, it is important to emphasize that teamwork can have various implications and that managers need to know what steps to take to ensure effective teamwork. Therefore, team adaptation as the adjustment to relevant team processes [25] is a critical issue to be observed and implemented.

A functional approach to team efficiency focuses on goals, integration, decision making, meeting management and decision implementation as well as creating a healthy team climate [26]. Of course, some of these functions will be different in different teams, for example in manufacturing or service industries, in management teams or engineering teams, etc. Several characteristics and factors affect a team’s success and effectiveness. Some of them are [27,28]:

- The common goal they strive for;
- Possession of skills, knowledge in the field they study and work on;
- Development of communication channels through which information is transmitted;
- Trust between team members;
- Motivation that leads to success;
- Joint efforts of team members to solve the task;
- Efficiency and productivity of team workers;
- Active listening and respecting the ideas of other team members;
- Flexibility and adaptation to environmental influences;
- Existence of a leader in the team who will lead the whole team and achieve success;
- Planning, organizing, leading and controlling the work of the team;
- Existence of a mission and vision of the team, etc.

As for measuring of team effectiveness, several scales have been developed.

As mentioned above, it is clear that measurement of team effectiveness is still a developing concept. Many scales are developed, but there are different approaches and there is no unique research approach

into this area. As illustrated in Table 1, the majority of scales were developed for the service sector, which is very important, given the fact that the subject of this paper is the banking sector in Serbia.

**Table 1.** Measures of team effectiveness.

Author(s)	Measurement Model
Campion Medsker, Higgs (1993)	Developed a scale to ascertain work group effectiveness with 19 different dimensions grouped into five themes, namely job design, interdependence, composition, context, and process.
Kirkman and Shapiro (1997)	Proposed a globalized scale to evaluate team effectiveness in multi-national corporations and identified productivity, quality, costs, safety, and customer satisfaction as the determinants of team effectiveness.
Hoegl and Gemuenden (2001)	Developed a scale for measuring teamwork quality; the model examines the attitudinal and behavioral dimensions of team effectiveness, which can indicate the quality of collaboration in teams.
Bateman, Wilson, Bingham (2002)	Developed a team effectiveness audit tool with four factors: effectiveness of team outputs, team identity/team synergy, clarity of performance objectives, and team role clarity.
Gibson, Zellmer-Bruhn, Schwab (2003)	Key dimensions of team effectiveness in multinational organizations are goal, customer, timeliness, quality, and productivity.
Brewer and Mendelson (2003)	Developed a systematic methodology and measurement for team effectiveness in engineering/business student teams using three outcomes: creativity, collaboration and productivity.
Wageman, Hackman, Lehman (2005)	Identified process criteria and team social process as the two main dimensions of team behavior and performance.
Hutchinson, Cooper, Dean, McIntosh, Patterson, Stride, et al. (2006)	Identified two dimensions of teamwork: input into decisions and collaboration with other staff and information handover.
Senior and Swailes (2007)	Developed a teamwork survey instrument and found five factors with one factor having three sub-factors, namely vision, task orientation, and three sub-factors, namely participative safety, support for innovation, and interaction frequency.
McComb, Kennedy, Green, Compton (2008)	Developed a teamwork survey instrument and found four factors, namely resource allocation, team leader authority, significant project objectives and management involvement, as descriptors of team efficiency, and goal achievement and project efficiency as factors of team performance.
Gordon, Jorm, Shulruf, Weller, Currie, Lim, Osomanski (2016)	Developed a multidimensional self-assessment teamwork tool to assess teamwork among nursing and medical students and identified teamwork coordination and communication and information sharing and support as key determinants for team effectiveness.
Guchait, Lei, Tews (2016)	Measured team effectiveness in the hospitality industry through team satisfaction and team performance, while the behavioral dimension of team effectiveness was not part of the study.

Source: [29] (p. 22).

After the exploration of teamwork effectiveness, it is important to investigate team performances as a teamwork outcome.

## 2.2. Understanding Teamwork Performances

Team performances can be seen from a different point of view. Hackman found that productivity, cohesion, and learning are the three most important criteria for team effectiveness [30]. Other authors presented team performances in terms of quality as decision quality, product quality, production quantity, etc. [31]. Rosen and Dietz found that the main teamwork outcomes are task outcomes such as error rates, completion time; member satisfaction; and learning outcomes like enhanced knowledge, skills, and attitudes [32]. One of the potential indicators of teamwork performance is consumer satisfaction [33]. When measuring team performance, there are also criteria which refer to the team members' affective reactions and team viability [24]. Affective reactions generally refer to team atmosphere and how members are treated; team viability is usually associated with the team-level criterion, while members who wish to remain a team member, satisfaction, team climate, team commitment and group cohesion are used as indicators of viability [17] (p. 418). In the case of

teamwork behaviors, a recent study by Young showed that teamwork behaviors obtain group-level coworker communication, cooperation, and helping behavior [7].

Regardless of the type of performance that is measured, team performance can be investigated as organizational-level performance, team performance behaviors and outcomes, and role-based performance [24] (p. 100):

- “organizational-level performance refers to top management teams but may concern the question of teams interdependence too,
- team performance behaviors (e.g., team feedback seeking; learning behaviors, error discussion) and outcomes as a result of performance behaviors (e.g., managers’ rating scale usage, measuring sales or indices of effectiveness),
- role-based performance refers to team members competencies necessary to perform their jobs,
- performance composite, as a blended measure of team outcomes, which is based on different team functions, and as a result produces a blended set of different indicators, from planning and problem-solving measures to productivity and overall effectiveness”.

In the case of productivity, authors usually refer to the results that are expected from a team as the teamwork outcome. Some of the potential indicators of team productivity are the level of reached output, achievement of goals, whether results are achieved in a timely manner, how effective the outcome was, new product development, improved market share, etc. In general, the productivity criterion asks whether the teams output meets the standards of those who use it—end users [34] (pp. 36–37). For example, in the latest study of teamwork, three dimensions of teamwork performance were used, i.e., achieving sales objectives, the extent of technical knowledge, and administrative performance [35].

### 2.3. Research Question

Studies on team and work groups performance are crucial because they help trainers and developers to understand what dimensions they should focus on and manage when the aim is to make teams and work groups effective or even successful [27]. Some of the factors of team effectiveness that can influence teamwork performance were explored in previous research. Gao et al. found that team quality, measured by communication, coordination, balance of member contributions, mutual support, effort and cohesion, was positively related to team performance, the personal success of team members, and project success [36–38]. Aryee et al. found that the innovative behavior of employees was positively related to task performance [39], while team potency and team innovative behavior had a positive relation to team outcomes such as effort, performance, service quality, and member satisfaction [40]. Another significant factor for successful task performance in teamwork is the clarity of the proposed goals. Team goals were found to be positively related to team performance on business goal achievement, schedule performance, and team potency [41,42].

The present authors derive their initial assumptions from previous research, especially regarding factors like innovation, quality, goal clarity and team synergy. Innovation is a vital factor of success in modern business. Organizations that do not innovate cannot handle the growing customer needs and cannot deliver appropriate results. It is important for each organization to enhance the innovative behavior of their employees in order to improve their business processes, products and services. The following must be mentioned: team members’ dedication to quality, whether high standards are incorporated in teamwork, and whether team members work in accordance with those standards. This is especially important in teamwork, where it is necessary to deliver high performances by working in a group, with other members. In this sense, it is important to emphasize the team synergy, as the interaction of members when working together produces better total effects than the sum of the individual efforts of each member. It is expected that team synergy will increase teamwork performances. To achieve high-level performances, it is essential that team members have clearly stated goals that are specific, measurable, agreed on, real, and timely bounded, and that there is an

established performance management system which will enable monitoring, control, and feedback on goal achievement and results.

Based on the above-mentioned factors, the authors tried to explore the factors of perceived team effectiveness and their relation to team performance. The research question is: Which factors of teamwork effectiveness relates positively to team performance in banking sector.

### 3. Materials and Methods

The main goal of the research was to explore teamwork effectiveness in the banking sector in Serbia and to determine the relationship between perceived teamwork effectiveness and team performance. The authors conducted field research on the territory of the Republic of Serbia in the period between November 2019 and end of April 2020 to collect the data from banks on their teamwork effectiveness and team outcomes.

The authors used a questionnaire that was created on the basis of different previous research of Bateman et al. [43], originally designed for the delivery of services. There are three parts of the questionnaire: the first part is related to the demographic question of respondents (four questions regarding age, gender, education, position in organization), the second part contains questions on team effectiveness (45 questions based on Bateman et al.), and the third part is related to the question about team effectiveness and performance estimations (three questions: “How do you rate productivity of your team?”, “How do you rate the achieved goals of your team?”, and “How do you rate your participation in your team?”, according to Herrenkohl [44] (p. 174)). The questions were defined as closed questions, and respondents answered on a Likert scale, from 1 (weak) to 5 (very strong).

The team effectiveness questionnaire was divided into six potential factors [43] (p. 216):

- “Team synergy. A sense of purpose which is shared among team members.
- Performance objectives. There are clear performance objectives which have been established by the team, work activity or throughput levels which are monitored on an ongoing basis.
- Skills. Team members are adequately trained and competent to do their work, and there is flexibility in the use of skills.
- Use of resources. All resources, including people, buildings and equipment, are used effectively and to their optimal potential.
- Innovation. The team is constantly looking for ways of improving products and systems of work.
- Quality. There is a high level of customer awareness and standards are identified and monitored”.

The authors used personal communication with respondents in banks from the Republic of Serbia and an online (Google survey) questionnaire. The convenience sampling method was implemented. The questionnaire was personally filled out by respondents in the presence of the interviewer. Since the beginning of the Covid19 pandemic, both in the world and in the Republic of Serbia, most research was conducted online using Google survey. In the case of missing only one item for some of the variables from teamwork effectiveness, it was filled in by means of other items belonging to the same latent variable. In the case of several missing items, those questionnaires were excluded from the database and further analysis. To explore these relations, PLS analysis in the statistical software Smart PLS 3 was performed. Prior to performing SEM, the questionnaire was tested.

The sample consists of 401 banking employees, in 43 teams, from 16 banks, out of 26 in total that operate in the Republic of Serbia [45]. The sample size used in this research is acceptable according to Hair et al. [46] and the rule “ten times”, i.e., “sample size should be equal to the larger of ten times the largest number of formative indicators used to measure a single construct, or ten times the largest number of structural paths directed at a particular construct in the structural model” (p. 448). The fact that these 16 banks represent 61.5% of all banks in Serbia was taken into consideration. All banks in the sample are in private ownership and they have been doing business for more than 10 years in Serbia. Table 2 presents the main features of the sample. A total of 56.6% respondents were male and 43.4% were female. Most of the respondents were between 36 and 45 years old, while there were no

respondents between 55 and 65 years of age in the sample. The largest part of the sample consists of employees who hold bachelor degrees, 43.9%, and who work in professional positions in banks, 63.8%.

**Table 2.** Sample.

Sex	Valid Percent	Age	Valid Percent
Male	56.6	18–35	29.4
Female	43.4	36–45	36.7
Total	100.0	46–55	33.9
		55–65	0.00
		Total	100.0

Education	Valid Percent	Position	Valid Percent
High school	39.7	Professional worker	63.8
Bachelor	43.9	Managerial position	22.7
Master/PhD	16.5	Administration worker	13.5
Total	100.0	Total	100.0

Source: Authors.

## 4. Results

### 4.1. Testing the Questionnaire

The first part of the analysis deals with the measurement of the reflective constructs in the proposed model. Researchers in this area suggested that it is necessary to analyze indicator loadings, internal consistency reliability, convergent validity, and discriminant validity [47,48]. Table 3 presents reflective factor loadings for each variable in the model. In the first step of the analysis, some variables did not pass this test, namely, where it is stated that loadings below 0.708 should be excluded from the later analysis. In this case, those were variables Q1, Q5, Q6, Q17, and Q24, and Perf2. After excluding variables that did not pass the first test, in the second step, all factors had loadings higher than the thresholds of 0.708 (which is the minimum according to Hair et al. [47]). Table 3 presents the results of the multicollinearity analysis. According to Grubor et al. [48,49], multicollinearity issues are presented if the variance inflator factors surpass the value of 3.3. In the presented case, all VIFs are below 3.3, which indicates that there are no collinearity issues.

**Table 3.** Outer loadings and variance inflation factors for research variables.

	Team Performances	Team Synergy	Objectives	Skills	Resources	Innovation	Quality	VIF
Perf1	0.939							1.429
Perf3	0.802							1.429
Q2		0.726						1.704
Q3		0.742						1.743
Q4		0.802						2.106
Q7		0.810						2.162
Q8		0.783						3.110
Q9		0.811						2.280
Q10		0.778						2.948
Q12			0.781					1.775
Q13			0.817					1.910
Q14			0.750					1.773
Q15			0.800					1.796
Q16			0.727					1.613

Table 3. Cont.

	Team Performances	Team Synergy	Objectives	Skills	Resources	Innovation	Quality	VIF
Q18				0.760				1.686
Q19				0.784				2.713
Q20				0.778				2.759
Q21				0.751				2.152
Q22				0.793				1.896
Q23				0.779				1.857
Q25					0.792			1.966
Q27					0.820			1.958
Q28					0.760			1.769
Q30					0.832			2.033
Q31					0.823			2.054
Q32						0.797		2.210
Q33						0.798		2.137
Q35						0.866		2.756
Q36						0.837		2.465
Q37						0.829		2.084
Q38							0.794	2.148
Q39							0.759	1.949
Q40							0.824	2.370
Q41							0.825	2.412
Q42							0.827	2.700
Q43							0.824	2.594
Q44							0.821	2.434

Source: Authors.

Table 4 presents internal consistency reliability and convergent validity, measured by Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE). Internal consistency and convergent validity are reached for all constructs because the Cronbach's Alpha values are between 0.70 and 0.90, composite reliability is between 0.70 and 0.95 for each construct, and AVE is higher than 0.50, as proposed by Hair et al. [47]. Regarding discriminant validity, which measures whether each construct captures a unique phenomenon that is not represented by any other construct, the Fornell–Larcker criterion was performed. According to data in Table 5, discriminant validity was reached.

Table 4. Internal consistency reliability and convergent validity.

	Cronbach's Alpha	Composite Reliability	(AVE)
Innovation	0.883	0.915	0.682
Objectives	0.835	0.883	0.602
Quality	0.913	0.931	0.658
Resources	0.866	0.902	0.649
Skills	0.869	0.900	0.600
Team performances	0.708	0.865	0.763
Team synergy	0.892	0.915	0.608

Source: Authors.

Table 5. Discriminant validity.

	Innovation	Objectives	Quality	Resources	Skills	Team Performances	Team Synergy
<b>Innovation</b>	0.826						
<b>Objectives</b>	0.738	0.776					
<b>Quality</b>	0.818	0.755	0.811				
<b>Resources</b>	0.789	0.739	0.731	0.806			
<b>Skills</b>	0.795	0.756	0.739	0.776	0.774		
<b>Team performances</b>	0.629	0.596	0.642	0.516	0.586	0.873	
<b>Team synergy</b>	0.713	0.758	0.734	0.655	0.727	0.603	0.779

Source: Authors.

### 4.2. Testing the Research Question

The second part of the analysis was dedicated to the investigation of the relations between the factors of team effectiveness and team performance. The data from Table 6 and Figure 4 show the coefficients for PLS-SEM relations, their significance level, and the R2 value. The R2 value of the model is 0.477. This indicates that the independent variables (factors of teamwork effectiveness) explain 47.7% of the variance in the team performance in the selected sample.

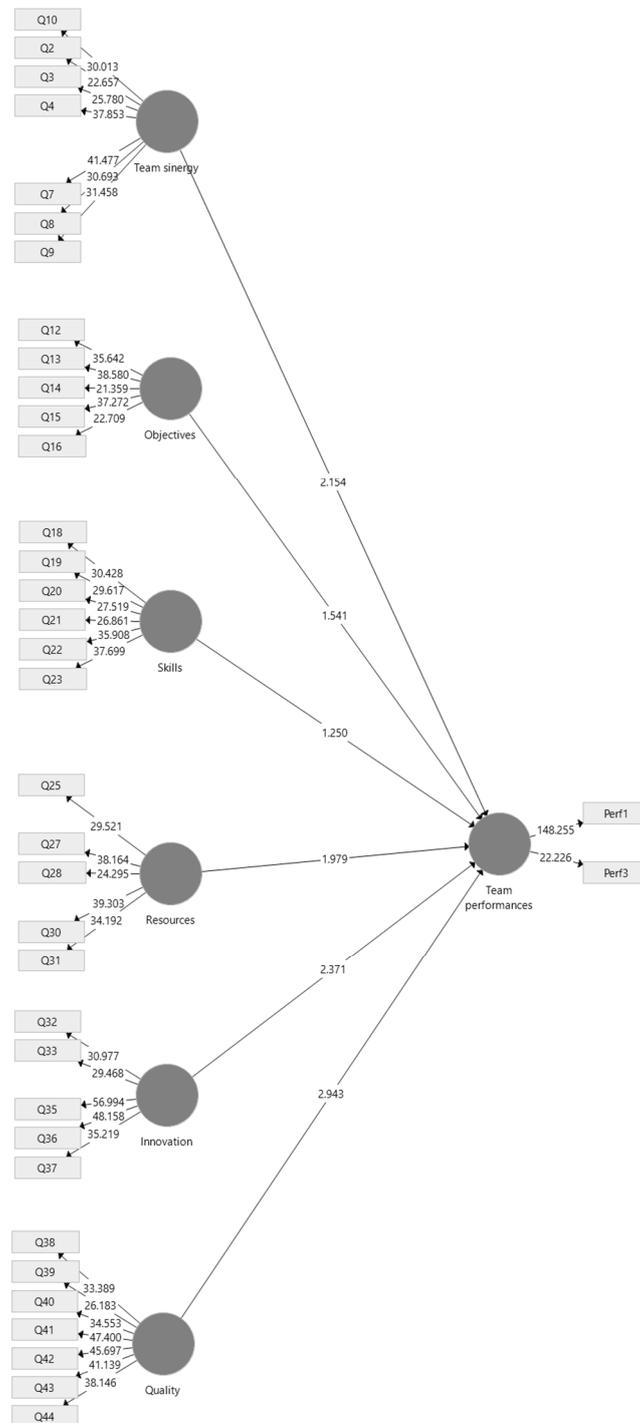


Figure 4. Results of bootstrapping. Source: Authors.

**Table 6.** Results of the bootstrapping analysis.

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	p Values
<b>Innovation -&gt; Team performances</b>	0.235	0.238	0.099	2.371	0.018
<b>Objectives -&gt; Team performances</b>	0.130	0.129	0.084	1.541	0.123
<b>Quality -&gt; Team performances</b>	0.260	0.255	0.088	2.943	0.003
<b>Resources -&gt; Team performances</b>	-0.139	-0.131	0.070	1.979	0.048
<b>Skills -&gt; Team performances</b>	0.093	0.095	0.075	1.250	0.211
<b>Team synergy -&gt; Team performances</b>	0.169	0.166	0.079	2.154	0.031

Source: Authors.

The coefficients representing the relationships between independent and dependent variables showed different relations (Table 6). The recorded values are the following. Positive statistically significant relations were found in the case of innovation (T = 2.371), quality (T = 2.943), and team synergy (T = 2.154). In the case of usage of resources, a negative statistically significant relationship with perceived teamwork performance (T = 1.979) was identified. In the case of objectives and skills, only statistically insignificant relations were detected.

## 5. Discussion and Conclusions

This study results showed similar relations to previous instances, namely that team synergy, innovation, and teamwork quality have positive relationships with team performance. The cohesion and synergy of team colleagues [36], teamwork quality [38], and innovative behavior [40] have positive relations with and lead to higher teamwork performance. This was an expected result, since team synergy brings greater cohesion and better cooperation between team members, which can lead to joint efforts to reach the proposed goals and achieve better results. The innovation and quality of teams in terms of their processes and achievements, are seen as the leading factors for the competitiveness and sustainability of teams and their results [7,36,38]. Therefore, these three factors should be more carefully planned, monitored, controlled, and enhanced by team leaders and managers in order to keep teams effective and provide better results. This is especially important for the innovation factor, since it is found that the competitiveness in the modern age can be achieved through development based on knowledge and innovation [50].

Conversely, the use of resources showed a negative relationship with team performance. This can be explained in the sense that, in this case, team members rated the usage of resources lower than other factors. They did not show a higher level of agreement on resource utilization in terms of their possibilities, materials, buildings, etc., and therefore this factor did not lead to higher performance. Although this factor showed a negative relationship, the other three factors showed stronger positive relationships, and contributed to better performances. Team goals and teams' skills had positive but statistically insignificant relations to team performances. This result diverges from previous studies, where these two factors were found to be statistically significant factors. The authors tried to explain this relation in the wider context of the banking industry, in which procedures and goals are usually well-established, highly formalized, and where skills and knowledge for different jobs and positions are gathered, and therefore definitively have a positive relationship with performance, but in modern business, which has greater competitiveness, and many changes and risks, this is insufficient for team success. Only a combination of skills, knowledge, and an innovative way of doing a job, team synergy, and quality of teamwork can lead to the greater performance and viability and sustainability of teams.

The practical implications of this paper lie in identifying the factors of teamwork effectiveness that are important for reaching the higher performance of bank teams. Fostering the innovative behavior of team coworkers, their cohesiveness and synergy, and quality can increase their performances in terms of productivity. The monitoring and management of resource usage, setting performance objectives and increasing their skills can lead to better performance, which is important for the creation of successful teams, as well as their viability and sustainability. Managers in banks should carefully set all important conditions for teamwork in order to monitor, control, and improve all crucial factors and create favorable working conditions for their teams. This is especially important if one bears the high competitiveness of contemporary business conditions in mind, and even new challenges like the Covid19 virus pandemic that forced most teams to work in a virtual environment, where new problems can arise, such as the lower level of trust between members [28], and when digital business and digital strategies are becoming increasingly important [51,52]. This research is one of the first to deal with the issues of a teamwork effectiveness and teamwork performances in the banking sector in Serbia. The results offer important insight and contribution in the local context, where many banks organize their work through teams, but there is not enough information yet on how to create effective teams and increase their performances. To date, many researchers investigated topics such as the satisfaction and loyalty of the employees in the banking sector [53,54], leadership [55] and top management involvement and knowledge sharing [56,57], and change management and sustainability [58]. Therefore, the results of this paper can serve as a starting point for creating strategies and actions for team development and training with the aim of reaching higher level of team members' effectiveness and performances.

As far as the limitations of the study are concerned, one is certainly the use of this specific questionnaire. Since this area of organizational behavior is still developing and given the fact that team effectiveness and team performance have not been unambiguously determined, there is a potential fear of leaving out some important factors. Because of that, the authors used one of the well-known questionnaires, developed for the purpose of service industries (and banking sector belongs to services). Another limitation is related to the sample. Although the authors explored 16 out of 26 banks in Serbia, the number of employees that was obtained in the sample is relatively low: 401 employees. On the other hand, not all employees are included in teams, so the authors examined only those employees who worked in teams. These limitations form a good basis for further directions of research. The authors could increase the number of respondents in banks, obtain a more representative sample, introduce additional questions and develop a questionnaire that will contain more factors of teamwork effectiveness, and investigate managers in banks concerning team performances.

**Author Contributions:** Conceptualization M.A.; writing of original draft preparation, review and editing A.S.; data analysis and methodology N.B. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

1. Barrick, M.R.; Stewart, G.L.; Neubert, M.J.; Mount, M.K. Relating member ability and personality to work-team processes and team effectiveness. *J. Appl. Psychol.* **1998**, *83*, 377–391. [[CrossRef](#)]
2. Mehta, A.; Mehta, N. Knowledge integration and team effectiveness: A team goal orientation approach. *Decis. Sci.* **2018**, *49*, 445–486. [[CrossRef](#)]
3. Shuffler, M.L.; Diazgranados, D.; Maynard, M.T.; Salas, E. Developing, sustaining, and maximizing team effectiveness: An integrative, dynamic perspective of team development interventions. *Acad. Manag. Ann.* **2018**, *12*, 688–724. [[CrossRef](#)]
4. Charas, S. Improving corporate performance by enhancing team dynamics at the board level. *Int. J. Discl. Gov.* **2015**, *12*, 107–131. [[CrossRef](#)]
5. Agarwal, S.; Adjirackor, T. Impact of teamwork on organizational productivity in some selected basic schools in the Accra metropolitan assembly. *Eur. J. Bus. Econ. Account.* **2016**, *4*, 40–52.

6. Driskell, J.E.; Salas, E.; Driskell, T. Foundations of teamwork and collaboration. *Am. Psychol.* **2018**, *73*, 334–348. [[CrossRef](#)]
7. Yang, J. Thriving organizational sustainability through innovation: Incivility climate and teamwork. *Sustainability* **2016**, *8*, 860. [[CrossRef](#)]
8. Hanaysha, J. Examining the effects of employee empowerment, teamwork, and employee training on organizational commitment. *Procedia Soc. Behav. Sci.* **2016**, *229*, 298–306. [[CrossRef](#)]
9. Serinkan, C.; Kızılođlu, M. Innovation management and teamwork: An investigation in Turkish banking sector. *J. Manag. Policies Pract.* **2015**, *3*, 94–102. [[CrossRef](#)]
10. Salas, E.; Sims, D.E.; Burke, C.S. Is there a “big five” in teamwork? *Small Group Res.* **2005**, *36*, 555–599. [[CrossRef](#)]
11. Morgeson, F.P.; Reider, M.H.; Campion, M.A. Selecting individuals in team settings: The importance of social skills, personality characteristics, and teamwork knowledge. *Pers. Psychol.* **2005**, *58*, 583–611. [[CrossRef](#)]
12. Mickan, S.; Rodger, S. Characteristics of effective teams: A literature review. *Aust. Health Rev.* **2000**, *23*, 201–208. [[CrossRef](#)] [[PubMed](#)]
13. Delice, F.; Rousseau, M.; Feitosa, J. Advancing teams research: What, when, and how to measure team dynamics over time. *Front. Psychol.* **2019**, *10*, 1324. [[CrossRef](#)]
14. Bell, S.T.; Marentette, B.J. Team viability for long-term and ongoing organizational teams. *Organ. Psychol. Rev.* **2011**, *1*, 275–292. [[CrossRef](#)]
15. Mathieu, J.E.; Gallagher, P.T.; Domingo, M.A.; Klock, E.A. Embracing complexity: Reviewing the past decade of team effectiveness research. *Annu. Rev. Organ. Psychol. Organ. Behav.* **2019**, *6*, 17–46. [[CrossRef](#)]
16. Bommer, W.H.; Johnson, J.L.; Rich, G.A.; Podsakoff, P.M.; MacKenzie, S.B. On the interchangeability of objective and subjective measures of employee performance: A meta-analysis. *Pers. Psychol.* **1995**, *48*, 587–605. [[CrossRef](#)]
17. Mathieu, J.; Maynard, M.T.; Rapp, T.; Gilson, L. Team effectiveness 1997–2007: A review of recent advancements and a glimpse into the future. *J. Manag.* **2008**, *34*, 410–476. [[CrossRef](#)]
18. Bianco, F.; Venezia, M. Features of R&D Teams and innovation performances of sustainable firms: Evidence from the “sustainability pioneers” in the IT hardware industry. *Sustainability* **2019**, *11*, 4524. [[CrossRef](#)]
19. Bell, C.; Dodd, N.; Mjoli, T. The effect of participative and directive leadership on team effectiveness among administrative employees in a South African Tertiary Institution. *J. Soc. Sci.* **2018**, *55*, 81–91.
20. McGrath, J.E. *Social Psychology: A Brief Introduction*; Holt: New York, NY, USA, 1964.
21. Dulebohn, J.H.; Hoch, J.E. Virtual teams in organizations. *Hum. Resour. Manag. Rev.* **2017**, *27*, 569–574. [[CrossRef](#)]
22. Graaf, D.; Koria, M.; Karjalainen, T. Modelling Research into Cross-functional Team Effectiveness. In Proceedings of the IASDR Conference, Seoul, Korea, 18–22 October 2009; pp. 2363–2372. Available online: <https://pdfs.semanticscholar.org/b2b3/5e472a399570b060230baf8fc9c78f928ce4.pdf> (accessed on 27 August 2020).
23. Ilgen, D.R.; Hollenbeck, J.R.; Johnson, M.; Jundt, D. Teams in organizations: From input-process-output models to IMOI models. *Annu. Rev. Psychol.* **2005**, *56*, 517–543. [[CrossRef](#)] [[PubMed](#)]
24. Ulrych, W. The Constraints and Problems in Team Performance Management. *Zesz. Nauk. Univ. Ekon. Krakowie* **2014**, *933*, 95–108. [[CrossRef](#)]
25. Rico, R.; Gibson, C.B.; Sánchez-Manzanares, M.; Clark, M.A. Building team effectiveness through adaptation: Team knowledge and implicit and explicit coordination. *Organ. Psychol. Rev.* **2019**, *9*, 71–98. [[CrossRef](#)]
26. Singh, A.K.; Muncherji, N. Team effectiveness and its measurement: A framework. *Glob. Bus. Rev.* **2007**, *8*, 119–133. [[CrossRef](#)]
27. Ceschi, A.; Dorofeeva, K.; Sartori, R. Studying teamwork and team climate by using a business simulation. *Eur. J. Train. Dev.* **2014**, *38*, 211–230. [[CrossRef](#)]
28. Lukić, J.M.; Vračar, M.M. Building and nurturing trust among members in virtual project teams. *Strateg. Manag.* **2018**, *23*, 10–16. [[CrossRef](#)]
29. Latif, K.F.; Williams, N. Team effectiveness in non-governmental organizations (NGOs) projects. *Eval. Program Plan.* **2017**, *64*, 20–32. [[CrossRef](#)] [[PubMed](#)]
30. Hackman, R. The design of work teams. In *Handbook of Organizational Behavior*; Lorsch, J., Ed.; Prentice-Hall: Englewood Cliffs, NJ, USA, 1987; pp. 315–342.
31. De Dreu, C.K.; Weingart, L.R. Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis. *J. Appl. Psychol.* **2003**, *88*, 741–749. [[CrossRef](#)]

32. Rosen, M.A.; Dietz, A.S. Team performance measurement. In *The Wiley Blackwell Handbook of the Psychology of Team Working and Collaborative Processes*; Salas, E., Rico, R., Passmore, J., Eds.; John Wiley & Sons Ltd.: Chichester, UK, 2017; pp. 479–502.
33. Edmondson, A. Psychological safety and learning behavior in work teams. *Adm. Sci. Q.* **1999**, *44*, 350–383. [[CrossRef](#)]
34. Thompson, L.L. *Making the Team—A Guide for Managers*, 2nd ed.; Pearson Education, Inc.: Upper Saddle River, NJ, USA, 2004; pp. 36–37.
35. Bartsch, S.; Weber, E.; Büttgen, M.; Huber, A. Leadership matters in crisis-induced digital transformation: How to lead service employees effectively during the COVID-19 pandemic. *J. Serv. Manag.* **2020**. [[CrossRef](#)]
36. Gao, J.; Huang, C.; Su, J.; Xie, Q. Examining the Factors Behind the Success and Sustainability of China’s Creative Research Group: An Extension of the Teamwork Quality Model. *Sustainability* **2019**, *11*, 1195. [[CrossRef](#)]
37. Hoegl, M.; Gemuenden, H.G. Teamwork quality and the success of innovative projects: A theoretical concept and empirical evidence. *Organ. Sci.* **2001**, *12*, 435–449. [[CrossRef](#)]
38. Hoegl, M.; Ernst, H.; Proserpio, L. How Teamwork Matters More as Team Member Dispersion Increases. *J. Prod. Innov. Manag.* **2007**, *24*, 156–165. [[CrossRef](#)]
39. Aryee, S.; Walumbwa, F.O.; Zhou, Q.; Hartnell, C.A. Transformational leadership, innovative behavior, and task performance: Test of mediation and moderation processes. *Hum. Perform.* **2012**, *25*, 1–25. [[CrossRef](#)]
40. Le Blanc, P.M.; González-Romá, V.; Wang, H. Charismatic leadership and work team innovative behavior: The role of team task interdependence and team potency. *J. Bus. Psychol.* **2020**. [[CrossRef](#)]
41. McComb, S.A.; Green, S.G.; Compton, W.D. Project goals, team performance, and shared understanding. *Eng. Manag. J.* **1999**, *11*, 7–12. [[CrossRef](#)]
42. Hu, J.; Liden, R.C. Antecedents of team potency and team effectiveness: An examination of goal and process clarity and servant leadership. *J. Appl. Psychol.* **2011**, *96*, 851–862. [[CrossRef](#)]
43. Bateman, B.; Wilson, F.C.; Bingham, D. Team effectiveness—development of an audit questionnaire. *J. Manag. Dev.* **2002**, *21*, 215–226. [[CrossRef](#)]
44. Herrenkohl, R.C. *Becoming a Team, Achieving a Goal*; Thomson Corporation, South-Western Publishing: Mason, OH, USA, 2004; pp. 168–253.
45. National Bank of Serbia. Available online: [https://www.nbs.rs/export/sites/default/internet/latinica/50/50\\_2.html](https://www.nbs.rs/export/sites/default/internet/latinica/50/50_2.html) (accessed on 26 August 2020).
46. Hair, J.; Hollingsworth, C.L.; Randolph, A.B.; Chong, A.Y.L. An updated and expanded assessment of PLS-SEM in information systems research. *Ind. Manag. Data Syst.* **2017**, *117*, 442–458. [[CrossRef](#)]
47. Hair, J.F.; Risher, J.J.; Sarstedt, M.; Ringle, C.M. When to use and how to report the results of PLS-SEM. *Eur. Bus. Rev.* **2019**, *31*, 2–24. [[CrossRef](#)]
48. Grubor, A.; Berber, N.; Aleksić, M.; Bjekić, R. The influence of corporate social responsibility on organizational performances: A research in AP Vojvodina. *Anal. Ekon. Fak. Subotici* **2020**, *56*, 3–13. [[CrossRef](#)]
49. Grubor, A.; Milicevic, N.; Djokic, N. Social-Psychological Determinants of Serbian Tourists’ Choice of Green Rural Hotels. *Sustainability* **2019**, *11*, 6691. [[CrossRef](#)]
50. Krstić, M.; Filipe, J.A.; Chavaglia, J. Higher education as a determinant of the competitiveness and sustainable development of an economy. *Sustainability* **2020**, *12*, 6607. [[CrossRef](#)]
51. Kontić, L.; Vidicki, Đ. Strategy for digital organization: Testing a measurement tool for digital transformation. *Strateg. Manag.* **2018**, *23*, 29–35. [[CrossRef](#)]
52. Guinan, P.J.; Parise, S.; Langowitz, N. Creating an innovative digital project team: Levers to enable digital transformation. *Bus. Horiz.* **2019**, *62*, 717–727. [[CrossRef](#)]
53. Savić, M.; Đorđević, P.; Nikolić, D.; Mihajlović, I.; Živković, Z. Modeling the influence of EFQM criteria on employees satisfaction and loyalty in transition economy: The study of banking sector in Serbia. *Serb. J. Manag.* **2013**, *9*, 15–30. [[CrossRef](#)]
54. Božović, J.; Božović, I.; Ljumović, I. Impact of HRM practices on job satisfaction of employees in Serbian banking sector. *Manag. J. Sustain. Bus. Manag. Sol. Emerg. Econ.* **2019**, *24*, 63–77. [[CrossRef](#)]
55. Berber, N.; Slavić, A.; Miletić, S.; Simonović, Z.; Aleksić, M. A Survey on Relationship between Leadership Styles and Leadership Outcomes in the Banking Sector in Serbia. *Acta Polytech. Hung.* **2019**, *16*, 167–184. [[CrossRef](#)]

56. Milošević, N.; Tošković, O.; Rakočević, S.B. Does perceived top management involvement and knowledge sharing affect perceived project performance? Evidence from the banking sector. *J. East Eur. Manag. Stud.* **2019**, *24*, 259–279. [[CrossRef](#)]
57. Tornjanski, V.; Petrović, D.; Nešić, S. Effectiveness of knowledge transfer between project team members in digitally disrupted organizations. *Manag. J. Sustain. Bus. Manag. Sol. Emerg. Econ.* **2019**, *25*, 1–14. [[CrossRef](#)]
58. Kontic, L.; Kontic, J. Sustainability and readiness for change: Insights from a banking case study in Serbia. *Amfiteatru Econ.* **2012**, *14*, 537.

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