



Factor Analysis of Interteam Collaboration Process for Family Planning Program (Longitudinal Prospective Time Series Design)

Anif Prasetyorini^{1,2}*^(D), Thinni Nurul Rochmah^{3,4}^(D), Fendy Suhariadi^{5,6}^(D), Achmad Djunawan²^(D), Serlly Drastyana²^(D)

¹Doctoral Program, Faculty of Public Health, Universitas Airlangga, Surabaya, Indonesia; ²Hospital Administration, College of Health Sciences, Soetomo Hospital Foundation, Surabaya, Indonesia; ³Department of Health Administration and Policy, Faculty of Public Health, Universitas Airlangga, Surabaya, Indonesia; ⁴The Airlangga Centre for Health Policy Research Group, Surabaya, Indonesia; ⁵Doctoral in Human Resources Development, Postgraduate School, Universitas Airlangga, Surabaya, Indonesia; ⁶Department of Psychology, Faculty of Pscychology, Universitas Airlangga, Surabaya, Indonesia

Abstract

Edited by: Sasho Stoleski Citation: Prasetyorini A, Rochmah TN, Suhariadi F, Djunawan A, Drastyana S. Factor Analysis of Interteam Collaboration Process for Family Planning Program (Longitudinal Prospective Time Series Design). Open AccessMacedJMedSci.2022Jun25;10(E):1535-1541.https:// doi.org/10.3889/oamjms.2022.9929 Keywords: Interteam; Collaboration; Time series; Program *Correspondence: Anif Prasetyorini, Doctoral Program of Public Health, Faculty of Public Health, Universitas of Public Health, Faculty of Public Health, Universitas Airdangga, Surabaya 60115, Indonesia; Hospital Administration, College of Health Sciences, Soetomo lospital Foundation, Surabaya, Indonesia. E-mail: anfi. prasetyorini-2019@fKm.unair.ac.id Received: 22-Apr-2022 Revised: 11-May-2022 Accepted: 15-Jun-2022 Copyright: © 2022 Anif Prasetyorini, Thirsi Num! December & Ended Copyright: © 2022 Anit Praselyonin, Thinni Nurul Rochmah, Serlly Chastyana Achmad Djunawan, Serlly Drastyana Funding: This study was funded by Postgraduate Education Scholarships Domestic Affairs (BPP-DN) from the Directorate General of Resources for Science, Technology and Higher Education in Indonesia Competing Interests: The authors have declared that no competing Interests exist.

Competing interests into database merels and a competing interests exist competing interests exist Open Access: This is an open-access article distributed under the terms of the Creative Commons Artifibution-NonCommercial 4.0 International License (CC BY-NC 4.0)

Introduction

The success of Family Planning (FP) program becomes intersectoral responsibility. In Indonesia, FP Program activities involve two institutions, namely, National Population and FP Board (BKKBN) and Ministry of Health. National Population and FP Board is responsible for demand creation of FP services while Ministry of Health is responsible for its supply. Technically, in district level, FP program is held by FP Program Team comprising Public Health Center staff (FP Program Coordinator of Public Health Center and Village's Midwife) and Extension Worker of FP Program of district (comprising Extension Worker Coordinator of FP Program and Extension Worker of FP program).

FP participant coverage indicator is one of output indicators which directly describe FP Program performance. Recent data of Lamongan Regency were

BACKGROUND: The success of Family Planning (FP) program is strongly determined by a collaboration process of two organizations responsible in managing the program. There has not any collaboration concept discussing the program within team level but belonging to different organizations

AIM: The objective of the study was to conduct factor analysis of interteam collaboration process in cross-organization for FP.

METHODS: This study was an observational study with a longitudinal prospective time series design involving 30 teams. One team consist of 1 coordinator midwife in charge of the FP program at the Community Health Center, 3 member midwives, 1 coordinator, and members from the FP service team (field extension unit). This study distributed questionnaires to 30 teams which were taken by simple random sampling to provide agreed answers. This measurement was carried out 3 times, namely, in November, December 2021 and January 2022. Data were analyzed using factor analysis through SPSS Program.

RESULTS: Factor analysis in interteam collaboration resulted in KMO value and Bartlett's test >0.5 with 0.000 significance and MSA value in Anti Image Metrics >0.5. The result of variable extraction process and factor rotation, with Eigen value was 1.661. The cumulative total variety value was 83.057%. Shared value (shared structural dimensions and shared team autonomy) and mutual benefit indicators could explain interteam collaboration variables.

CONCLUSION: This study demonstrated that interteam collaboration process was an three factor, effort for shared value of structural dimensions, and shared value of team autonomy process by considering mutual benefit of interteam belonging to different organizations.

> included in the bottom ten regencies having active FP participant coverage (70.93%), below the average percentage of participant coverage of East Java Province (75.56%) (Dinas Kesehatan Provinsi Jawa Timur, 2020) [1].

> So far, several studies have described the success of FP Program only seen from the public's point of view [2], [3], [4], [5], [6], [7], [8] and the roles of healthcare staff, especially in terms of supply/contraceptive tool supply. Those studies included contraceptive guideline [9], contraceptive financing policies [10], contraceptive usage failure policies [11], education and training for healthcare staff in administering contraceptive services [12], and monitoring and evaluation of FP program for healthcare staff [13]. Unfortunately, there has not yet any study discussing intersectoral collaboration. A good and continuous coordination between National Population and FP Board (BKKBN) and Ministry of Health in

national, provincial, and local regency/city levels in managing FP services become an essential topic to discuss [14].

FP program implementation in the field has many obstacles, although each organization's role has been clearly distinguished. Emerging collaboration between Public Health Center team and Extension Worker of FP Program team has often been disrupted by various problems such as differences in policy, culture, and leadership in implementing FP Program. Egosectoral mindset has remain affected the stakeholders' perception resulting in each responsible institution becomes fragmented by its respective work programs in each agency.

According to the literature review, collaboration levels comprise of 3 categories, including individual, team, and organization. Individual-level collaboration incorporates horizontal and vertical interpersonal collaboration [15]. Team-level collaboration within an organization includes inter-work unit collaboration [10]; interagency collaboration [11]; intra-organizational [10], [12]; and inter-departmental collaboration collaboration [13], [14]. Organization-level collaboration involvesinterorganizationalcollaboration[15],[16],[17],[18]; cross-sector collaboration [19]; multi-organizational partnerships [20]; multi-actor collaboration [21]; interagency collaboration [22], [23]; and intersectoral collaboration [24].

The most studied collaboration process includes interprofessional, interdepartmental/interwork unit/interagency/intraorganizational collaboration within the level of one organization or cross-sector/ interorganizational/multi-organizational/multi-actor/ interagency/intersectoral collaboration. However, there has been no literature discussing collaboration between teams belonging to different organizations which is called interteam collaboration in Non-Profit Programs to improve the team's performance. The aforementioned collaboration in this study developed interorganizational theory by Thomson and Perry (2006) and Thomson *et al.* (2007).

Objective

The objective of the study was to conduct factor analysis of interteam collaboration process in cross organization for FP program.

Methods

This research was an observational study with a longitudinal prospective time series design. The population in this study was the entire FP program team in Lamongan Regency employing 33 teams from two organizations that are responsible to implement the FP program in Lamongan regency: The Community Health Centre, and Population Control and FP Service. The unit of analysis was the FP program team in Lamongan Regency. There were 30 teams. One group consist of 1 coordinator midwife in charge of the FP program at the Community Health Center and 3 member midwives, 1 coordinator and members from the FP service team (field extension unit). The researcher chose this respondents because we only needed 2 coordinators and implementers in each work area as representatives by taking into account the time of the study.

The criteria for the FP program team were not from an area having a lockdown status, the Public Health Center and the FP extension worker team members were willing to be respondents, the team members could be either civil servants or honorary employees, the team members had worked at least 3 years doing the same job, and the coordinator midwife and the FP extension workers had served in the past 1 year (calculated at the time of data collection).

The sampling technique employed in this study was a simple random sampling. The number of samples after being calculated was 30 teams. Interteam collaboration was measured three times within a period of 3 months, namely, November, December 2021, and January 2022. Measurement of interteam collaboration was conducted through questionnaires.

Shared responsibility was measured based on interteam responsibility, while the shared cultural characteristics were measured utilizing an instrument developed by Abu Bakar and Connaughton (2019) adjusted to team's concept. Shared leadership measurement in this study applied a standard instrument, namely, Shared Professional Leadership Inventory for Teams. The measurement of shared decision making (SDM) in this study developed a standard instrument of The SDM-Q-9 [25]. The measurement of shared strategic coordination and communication mechanism used criteria by Vailitis. Shared resources were measured using 3M and 1T concepts. Shared risk was measured based on three items, namely risk reduction, risk mitigation and risk coping [26]. Mutual goal was measured based concept by Gulzar & Henry (2005). Mutual understanding was measured according to Kahn's concept (1996). Meanwhile, mutual trust was measured based on Mulroy's concept (1997).

The coordinator midwife, three member midwives/village midwives of FP program, one extension worker coordinator, and three extension worker members of FP program filled the questionnaire out. The answers were the result of the concentration of both parties. The measurement of interteam collaboration results was classified into four categories, namely, very poor (if the score was 54–94), not good (if the score was 95–135), good enough (if the score was 136–176), and good (if the score was 177–216). Factor analysis from SPSS program had been applied for data analysis to show factor of interteam collaboration from two organizations.

Ethical approval

This study was approved by the Decree of Faculty of Public Health Universitas Airlangga Number 39/EA/KEPK/2021.

Results

The research resulted that from 30 samples, 23.33% FP Program Coordinator Midwives did not position in the Primary Public Health Center. About 26.67% of FP Program Coordinator Midwives multitasked by doing other tasks and functions in the Public Health Centers. So did the Extension Workers of FP Program (PLKB), as 64% of the Extension Workers of FP Program multitasked by becoming Extension Workers Coordinator of FP Program of their respective districts. In addition to multitasking, the high number of reproductiveaged couples did not correspond to the existing number of the Extension Workers of FP Program.

Interteam collaboration is an interaction process between two teams belonging to two different organizations having different responsibilities but sharing the same goals, measured by two indicators, namely, shared value and mutual benefit. Interteam collaboration was measured 3 times during a period of 3 months, namely, November, December 2021, and January 2022. Identification results of interteam collaboration of interteam FP Program are viewed in Table 1.

Table 1: Identification results of interteam collaboration of interteam FP program for 3 months

Interteam	Mean			Sig. (Levene's test)	Remark	
collaboration	T1	T2	T3			
indicator						
Shared Value	124.53	125.30	125.87	0.821	Homogenous	
Mutual Benefit	27.73	27.83	27.97			
Total	152.26	153.13	153.84			
Category	Medium	Medium	Medium			

Based on the table, interteam collaboration within a period of 3 consecutive months belonged to medium category. The mean of each time period had an increase despite being insignificant. Shared value indicator category of the three periods belonged to medium category (score 115–160), while mutual benefit indicator of all measurement results belonged to high category (score 26–32). The indicator requiring the most attention was shared value. Based on Levene's test, the result showed that the three data had homogenous variety (sig. = 0.821).

Shared value is an effort to share in several things considered to be important in collaborating

interteam belonging to different organizations with sub variables of shared responsibility, shared organizational culture, shared leadership, SDM, shared strategic coordination, and communication mechanism, shared resources, and shared risk. Identification results of shared value of FP Program for 3 months are viewed in Table 2.

Table 2: identification results of shared value of FP Programfor 3 Months

Ohana di Valua di adan	Maria			0:	Deverage
Shared value Indicator	Mean			Sig.	кетагк
	T1	T2	Т3	(Levene's test)	
Shared responsibility	15.27	15.40	15.0	0.853	Homogenous
Shared organizational	11.97	11.97	11.97		
culture					
Shared leadership	51.0	51.23	51.43		
Shared decision making	12.27	12.33	12.37		
Shared strategic	14.90	15.07	15.13		
coordination and					
communication mechanism					
Shared Resources	10.50	10.50	10.50		
Shared Risk	8.63	8.80	9.07		
Total	124.53	125.30	125.87		
Category	Medium	Medium	Medium		

Table 2 demonstrated that shared value within three periods of measurement belonged to medium category. The mean of shared value had an insignificant increase. There were indicators not experiencing any increase or decrease which were shared organizational culture and shared resources. Indicator having the lowest mean was shared strategic coordination and communication mechanism resources. This is because the indicator's mean was too far from the maximum score. Based on Levene's test, the result showed that the three data of measurement results were homogenous (sig. = 0.853).

The second indicator of FP program interteam collaboration was mutual benefit. Mutual benefit is the similarity presence on several things between collaborating parties based on mutual goal, mutual understanding, and mutual trust. Identification results of FP Program mutual benefit are viewed in Table 3.

Table 3: Identification results of FP program mutual benefit for 3 months

Mutual Benefit Indicator	Mean			Sig (Lovene's test)	Pomark	
Mutual Denenit Indicator	Iviean			_ Sig. (Levene's test)	Remark	
	T1	T2	Т3			
Mutual Goal	7.30	7.30	7.30	0.939	Homogenous	
Mutual Understanding	10.50	10.53	10.63			
Mutual Trust	9.93	10.00	10.03			
Total	27.73	27.83	27.97			
Category	High	High	High			

Table 3 showed that mutual benefit within three periods of measurement belonged to high category. The mean of mutual benefit had an increase despite being insignificant. The indicator having the lowest mean was mutual trust. This is because the mean of the indicator was too far from the maximum value. Based on Levene's test, the result showed that the three data variants of measurement results were homogenous (sig. = 0.939).

According to the homogeneity test above, the data of t_3 were used for the next analysis. In addition to being homogenous, the result data of t_3 measurement

Table 4: Factor analysis of interteam collaboration of FP program team

Variable	KMO	Indicator	MSA	Principal component analysis			
	value	ue		Factor	Eigen	Cumulative	
				number	values	total variety	
Interteam	0.500	Shared Value	0.500	1	1.661	83.057	
Collaboration		Mutual Benefit	0.500				
Shared Value	0.672	Shared	0.574	2	2.974	42.486	
		responsibility			1.459	63.328	
		Shared	0.803				
		organizational					
		culture					
		Shared	0.689				
		leadership					
		Shared decision	0.730				
		making					
		Shared strategic	0.676				
		coordination and					
		communication					
		mechanism					
		Shared	0.709				
		Resources					
		Shared Risk	0.564				
Mutual Benefit	0.613	Mutual Goal	0.588	1	1.734	57.804	
		Mutual	0.587				
		Understanding	0 700				
		Mutual Irust	0.732				

became the last condition of FP Program team in conducting interteam collaboration.

Based on the Tabel 4, factor analysis in interteam collaboration resulted in KMO value and Bartlett's test >0.5 with 0.000 significance and MSA value in Anti Image Metrics >0.5. Consequently, the interteam collaboration variable was concluded to be feasible to be proceeded in the next stage of analysis. The result of variable extraction process and factor rotation, with Eigen value was 1.661 (meaning that the hypothesized variables could be grouped as one factor or one new variable). The cumulative total variety value was 83.057%. Shared value and mutual benefit indicators in this study could explain or measure interteam collaboration variable.

 Table 5: Indicators of composing factors of shared value based on rotation model factor analysis

Indicator	Component	
	1	2
Shared responsibility	0.907	-0.125
Shared organizational culture	0.558	0.250
Shared leadership	0.835	0.136
Shared decision-making	0.673	0.465
Shared strategic coordination and communication mechanism	0.343	0.619
Shared Resources	0.215	0.740
Shared Risk	-0.126	0.863
Correlation value based on component transformation matrix	0.814	0.814

Factor analysis in shared value resulted in KMO value and Bartlett's test >0.5 with 0.000 significance and MSA value in Anti Image Metrics >0.5. Therefore, the interteam collaboration variable was concluded to be feasible to be proceeded in the next stage of analysis. The result of variable extraction process and factor rotation, the number of yielded factor was 2. The first Eigen value was 2.974 with cumulative total variety value of 42.486%. The second Eigen value was 1.459 with cumulative total variety value of 63.328%.

Based on the Table 5, it could be understood that the indicator correlation value of shared responsibility, shared organizational culture, shared leadership, and SDM in component 1 was more than the indicator correlation value in component 2. Hence, those indicators belonged to factor 1. The indicator correlation value of shared strategic coordination and communication mechanism, shared resources, and shared risk in component 1 was less than the indicator correlation value in component 2. Hence, those indicators belonged to factor 2. Both factors above in this study were able to explain or measure shared value variable.

Correlation value of component transformation matrix in both components was more than 0.5. Thus, both created factors could be deemed feasible to explain all indicators in shared value.

Factor analysis in mutual benefit resulted in KMO value and Bartlett's test >0.5 with 0.011 significance and MSA value in Anti Image Metrics >0.5. Therefore, the mutual benefit variable was concluded to be feasible to be proceeded in the next stage of analysis. The result of variable extraction process and factor rotation, with Eigen value was 1.734 (meaning that the hypothesized variables could be grouped as one factor or one new variable). The cumulative total variety value was 57.804%. Mutual goal, mutual understanding, and mutual trust indicators in this study could explain or measure mutual benefit variable.

Discussion

This study applied interorganizational collaboration theory by Wood and Gray (1991), Thomson and Perry (2006), and Thomson *et al.*, (2007) to develop interteam collaboration concept. The reason is that the theory accommodates process of input and output as well as feedback presence, and therefore components required to do collaboration are accommodated in the process.

Interorganizational collaboration has five dimensions, namely, Governance, Administration, Organizational autonomy, Mutuality, and Norms. Based on the result of researchers' literature review and the factor analysis, interteam collaboration concept is a sharing value process by considering mutual benefit between two or more teams belonging to different organizations.

To run governance, administration and organizational autonomy need "shared value" and "mutual benefit" concepts conforming to the definition of the collaboration. Meanwhile, mutuality and norms belong to mutual benefit. Therefore, the researchers concluded that interteam collaboration is not merely related to presence or absence of governance, administration, organizational autonomy, mutuality, and norms dimensions, but it must have a component of how to do the collaboration well by applying shared value and mutual benefit.

These results are supported by related previous study concerning some indicators, including shared value, and mutual benefit as follows:

First factor of shared value (shared structural dimensions)

- 1. Shared responsibility is role sharing duty in FP services based on FP Service Management Guideline of Ministry of Health of Indonesia 2014.
- 2. Shared organizational culture is an important factor supporting collaboration directly [27].
- Shared leadership is one of indicators in collaboration [27] and has direct impact on team performance [28]. Researchers conceptualized collaborative leadership as leadership function distribution among group members [29], [30].
- 4. SDM is a process founded on mutual respect and partnership principles. Interorganizational collaboration requires several levels of interdependence, shared goals, shared norms, shared risks, SDM, and shared reward (or loss) among participating parties [16].

Second factor of shared value (shared team autonomy)

- 1. Shared strategic coordination and communication mechanism are collective efforts in managing activities, starting from planning to evaluation, and supported by formal communication efforts [27].
- Collaboration is completely difficult without sufficient fiscal, material resources and space. Concerning obstacles experienced by both sectors in obtaining resources for collaboration, any available resource must be used optimally. Optimal Resource Usage consists of four elements: (a) Financing mechanism; (b) resource investment to start and maintain the collaboration; (c) the geography of partner's closeness; and (d) time to do the collaboration [27].
- Interorganizational partnership is principally a risked effort [16]. Collaboration is not merely sharing resources, communication, or leadership, but an indicator to measure how far both involved parties are willing to share risks.

Mutual benefit factor

Mutuality dimension of a collaboration process refers to a forging relationship process benefitting organizations involved in the partnership. It works up differences to reach a relationship satisfying each organization's interests. Mutuality is rooted in interdependence [18]. In accordance with Gulzar and Henry (2005), collaboration is an effort to transact resources in achieving advantageous goals through agreed structures and processes.

Governance is a structural dimension of collaboration that institutionalizes a SDM process about the rules that will govern behavior (shared structural characteristics) and partner relationships and structures to reach agreement on collaborative activities and outcomes through shared power arrangements (shared leadership). Governance includes two things, namely, the negotiation process and commitment. Administration involves getting things done through an effective system that supports clear roles and responsibilities (shared responsibility), clear goals, and effective communication channels [18].

Based on the definition of governance and administration, the variables shared responsibility, shared cultural characteristics, shared leadership, and SDM are more suitable to be part of governance and administration. So the researchers gave the term shared structural dimension.

One of the most important collaboration dilemmas for leaders and managers of non-profit organizations is managing the inherent tension between partner organizations, interests in achieving the organization's mission individually and maintaining the distinct identities of the collaborating parties and collaboration interests, achieving collaboration goals, and maintaining accountability to collaborative partners and their stakeholders. The organizational autonomy dimension of the collaborative process, thus, refers to the process of managing or reconciling tensions between the organization and the (collective) interests of the collaboration.

This is in line with the results of the factor analysis on the shared value variable, that the shared strategic coordination and communication mechanism, shared resources, and shared risk become one separate component. These three sub-variables are very much needed in managing the tensions and interests of collaboration. So based on the definition of organizational autonomy, the three sub-variables above are more suitable to be part of shared team autonomy.

Study limitations

The limitation of this study includes small sample size and no intervention to create collaboration.

Conclusion

This study proved that interteam collaboration consist of three factors that shared structural dimensions and shared team autonomy process by regarding mutual benefit between two or more teams belonging to different organizations. Good shared value indicators include shared responsibility, organizational culture, leadership, decision-making (shared structural dimension). strategic coordination and communication mechanism, shared resources, and shared risk (shared team autonomy). Good mutual benefit indicators between two organizations occur when fulfilling components of mutual goal, understanding, and trust. This research helps provide new indicators of collaboration processes between teams from different organizations. With this new indicator, it can be used as a tool to measure the collaboration process for monitoring and evaluation. For better interteam collaboration in non-profit program.

References

- Dinas Kesehatan Provinsi Jawa Timur. Profil Kesehatan Provinsi Jawa Timur 2019. Dinas Kesehat: Provinsi Jawa Tengah; 2020. p. 1-123.
- Satriyandari Y, Quasimah Y, Fitriahadi E, Suryaningsih EK. Investigating the factors of contraception use among female sex workers. Open Access Maced J Med Sci. 2022;10(G):25-32. https://doi.org/10.3889/oamjms.2022.7376
- Ernawati H, Mas'udah AF, Emilia O, Lusmilasari L, Isroin L, Verawati M. The use of contraception and adolescent fertility in Indonesia. Open Access Maced J Med Sci. 2021;9:168-71. https://doi.org/10.3889/oamjms.2021.7096
- Brahmana IB, Majdawati A, Inayati I. The effectiveness of postpartum IUD compared to interval IUD in aisyiyah hospital Klaten. Open Access Maced J Med Sci. 2022;9(T5):103-8. https://doi.org/10.3889/oamjms.2021.7848
- Fajarningtiyas BN, Sulistiawan D, Naibaho MM, Arifa RF. Pattern and determinant of contraceptive use among women in indonesia from 2007 to 2017: Evidence from demographic and health survey. Open Access Maced J Med Sci. 2021;9:1363-70. https://doi./org/10.3889/oamjms.2021.7417
- Mahalia LD, Supriyanto S. The role of cultural capital in strengthening the relationship between need and demand for contraceptive devices and drugs in several cultural areas in Indonesia. Open Access Maced J Med Sci. 2021;9(E):1036-40. https://doi.org/10.3889/oamjms.2021.7039
- Rahmadani S, Fatiah MS, Wahyunita VD, Kristianto J, Mulyo GP. The dominant factors affecting the low participation of young women ever married in the family planning program (KB) in Papua Province (2017 IDHS data analysis). Open Access Maced J Med Sci. 2022;10:411-5.
- Osman A, Hoffman A, Moore S, Van der Spuy Z. Reproductive knowledge and use of contraception among women with diabetes. S Afr Med J. 2015;105(9):760-4. https://doi. org/10.7196/SAMJnew.8170 PMid:26428976
- 9. Nene Z, Hofmeyr GJ, Patel M, Panday M, Rees H, Makua M, et al. Changes to the world health organization guideline on

hormonal contraceptive eligibility for women at high risk of HIV: South African perspective and response. South Afr Med J. 2018;108(8):629-31. https://doi.org/10.7196/SAMJ.2018. v108i8.13160

PMid:30182875

- Whitford AB, Lee SY, Yun T, Jung CS. Collaborative behavior and the performance of government agencies. Int Public Manag J. 2010;13(4):321-49. https://doi.org/10.1080/1096749 4.2010.529378
- Ward KD, Varda DM, Epstein D, Lane B. Institutional factors and processes in interagency collaboration: The case of FEMA corps. Am Rev Public Adm. 2018;48(8):852-71. https://doi. org/10.1177/0275074017745354
- 12. Sanders NR, Premus R. Modeling the relationship between firm it capability, collaboration, and performance. J Bus Logist. 2005;26(1):1-23. https://doi.org/10.1002/j.2158-1592.2005. tb00192.x
- Kahn KB. Interdepartmental integration: A definition with implications for product development performance. J Prod Innov Manag. 1996;13(2):137-51. https://doi. org/10.1016/0737-6782(95)00110-7
- Garg KC, Padhi P. A Study of collaboration in laser science and technology. Scientometrics. 2001;51(2):415-27. https://doi. org/10.1023/A:1012709919544
- Audet M, Roy M. Using strategic communities to foster inter-organizational collaboration. J Organ Chang Manag. 2016;29(6):878-88. https://doi.org/10.1108/ JOCM-11-2013-0231
- Ada YA. How Does Interorganizational Collaboration Work? Examining Interorganizational Collaboration Among Human Services Non Profits. Champaign: University of Illinois at Urbana-Champaign; 2013.
- Karlsson M, Garvare R, Zingmark K, Nordström B. Organizing for sustainable inter-organizational collaboration in health care processes. J Interprof Care. 2020;34(2):241-50. https://doi.org/ 10.1080/13561820.2019.1638760
 PMid:31329471
- Thomson AM, Perry JL. Collaboration processes: Inside the black box. Public Adm Rev. 2006;66(1):20-32. https://doi. org/10.1111/j.1540-6210.2006.00663.x
- 19. Bryson JM, Crosby BC, Stone MM. The design and implementation of cross-sector collaborations: propositions from the literature. Public Adm Rev. 2006;66(Suppl 1):44-55. https://doi.org/10.1111/j.1540-6210.2006.00665.x
- Leufkens AS, Noorderhaven NG. Learning to collaborate in multi-organizational projects. Int J Proj Manag. 20411;29(4):432-41. https://doi.org/10.1016/j.ijproman.2011.01.004
- Torfing J. Collaborative innovation in the Public sector: The argument. Public Manag Rev. 2018;21(1):1-11. https://doi.org/ 10.1080/14719037.2018.1430248
- 22. Cooper M, Evans Y, Pybis J. Interagency collaboration in children and young people's mental health: A systematic review of outcomes, facilitating factors and inhibiting factors. Child Care Health Dev. 2016;42(3):325-42. https://doi.org/10.1111/ cch.12322

PMid:26860960

- 23. Cohen G. Cultural fragmentation as a barrier to interagency collaboration: A qualitative examination of texas law enforcement officers' perceptions. Am Rev Public Adm. 2018;48(8):886-901. https://doi.org/10.1177/0275074017744659
- Kousgaard MB, Scheele CE, Vrangbæk K. Inter-sectoral collaboration in municipal health centres: A multi-site qualitative study of supporting organizational elements and individual drivers. Int J Integr Care. 2019;19(2):1-11. https://doi. org/10.5334/ijic.4196

PMid:31244563

- Kriston L, Scholl I, Hölzel L, Simon D, Loh A, Härter M. The 9-item shared decision making questionnaire (SDM-Q-9). Development and psychometric properties in a primary care sample. Patient Educ Couns. 2010;80(1):94-9. https://doi. org/10.1016/j.pec.2009.09.034
 PMid:19879711
- Sagar AH, Siddik MA, Hasan R. The determinants of risk-sharing strategies of food-retailers: A study on Chittagong, Bangladesh. Int J Financ Res. 2020;11(6):337-47. https://doi.org/10.5430/ijfr. v11n6p337
- Valaitis R, Meagher-Stewart D, Martin-Misener R, Wong ST, MacDonald M, O'Mara L. Organizational factors influencing successful primary care and public health collaboration. BMC Health Serv Res. 2018;18(1):420. https://doi.org/10.1186/

s12913-018-3194-7 PMid[:]29880042

- Martin J, Cormican K, Sampaio SC, Wu Q. Shared leadership and team performance: An analysis of moderating factors. Proc Comput Sci. 2018;138:671-9. https://doi.org/10.1016/j. procs.2018.10.089
- 29. Contractor NS, DeChurch LA, Carson J, Carter DR, Keegan B. The topology of collective leadership. Leadersh Q. 2012;23(6):994-1011. https://doi.org/10.1016/j.leaqua.2012.10.010
- Meuser JD, Gardner WL, Dinh JE, Hu J, Liden RC, Lord RG. A network analysis of leadership theory: The infancy of integration. J Manage. 2016;42(5):1374-403. https://doi. org/10.1177/0149206316647099