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Leader-member exchanges in military healthcare organizations The interplay of relational dynamics

OBJECTIVE To explore the dynamics of dyadic interactions, as it was argued that leader-member relationships are formed and evolved as a social elaboration of interdependent dynamics that in turn shape the quality of those relationships in the specific social context. METHOD A quantitative survey was carried out in a military hospital where 53 leaders and 160 members that participated successfully established 160 leader-member pairs. RESULTS It was found that relational dynamics which exist in the military healthcare context shape the quality of leader-member relationships, influencing in turn leadership effectiveness. It was also shown that subordinates' intentional withholding of opinions and suggestions around work issues negatively influences members' perception of the quality of their relationship with leaders and this negative phenomenon in relationships can be eased by building up strong relational identities and increasing the frequency of leader-member meetings. CONCLUSIONS The understanding of human social constructions was reinforced by giving prominence to the existence of certain dynamics (relational identity, organizational silence and frequency of work meetings) which influence leadership relationships among military healthcare professionals. The study's findings support the notion that enhancing self-worth through quality leader-member interactions and supporting open communication constitute a stepping-stone towards work effectiveness in healthcare organizations.

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E. Maritsa,1

A. Goula,1

A. Psychogios,²

D. Latsou,1

G. Pierrakos¹

¹Department of Business Administration, School of Administrative, Economics and Social Sciences, University of West Attica, Athens, Greece ²Business School of Loughborough, University of Loughborough, Loughborough, United Kingdom; ALBA Graduate Business School, The American College of Greece, Athens, Greece

Η διεπαφή ηγέτη-μέλους σε στρατιωτικούς οργανισμούς υγειονομικής περίθαλψης: Η αλληλεπίδραση των σχεσιακών δυναμικών

Περίληψη στο τέλος του άρθρου

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It has not always been the case in the past, but nowadays leaders face one of the biggest challenges which is to make people and organizations, especially healthcare organizations being adaptable and resilient in the face of increasingly dynamic and demanding environments (e.g. bioevents, market unpredictability, abrupt change of work conditions). In this complex, eco-systems members that constitute the organizational social capital need to view their everyday practices through the lens of "relational versatile presence" in order to evolve in the workplace. This relational approach provides a subtle understanding of leadership practices that is crucial in healthcare settings where science and rational methods of healthcare professionals are influenced by the unpredictability of

medical-emergency, affecting relationships, their interdependencies and the effectiveness of management in healthcare organizations. $^{4-6}$

Moreover, there is a pressure placed on leaders in healthcare environments due to the economic downturn, the current health crisis (COVID-19) and by taking into account that exposure to traumatic events (natural disasters, violence, terrorism) is common and more than 2/3 of the general population may experience them during their life cycle. ^{7,8} In this crisis context, it was made clear that a leaderful environment or organization was needed to address the issues. As it is mentioned, people in the military are used to working under stress in uncertain environments and they are organized, have a good logistics set-up and are usually

very focused on the mission. From the World War II and thereafter, the concept of relational-oriented behavior is discussed in the traditional management as an important human social aspect. This aspect has been discussed on the basis of hierarchical systems where leaders raised the salience of organizational values with their behaviors, displayed high involvement in the task, linked their goals to the groups' perspectives and were supportive to their subordinates. 10-13

The social exchange theory in the workplace offers an explanatory framework of the interdependencies of the interactions that take place in the local social context of healthcare organizations,14 as well as the importance of redirecting emphasis away from the individual leader towards the system's phenomenon which is leadership.¹⁵ In this study, leadership was viewed as a process, where stakeholders (dyadic leader-member relationships) in the specific environment evolve to either expand the space of their potential influence, or shrink the space of their potential influence towards effectiveness.3 As a result, leadership is inherently relational and was seen as a process of organizing the valued human interconnections.3 What is more, as leadership is a dynamic process that exceeds individuals' capabilities and is viewed from the standpoint of interactions (bidirectional relations), 16,17 healthcare organizations are considered as systems of high relational dynamism, of wider system of interdependencies and social phenomena.5 Hence, health sector constitutes a rich environment to study human relationships and interactions, 18 and to exploit their potentials on improving relational effectiveness. Human-centered practices implemented in military healthcare environments may create effective networks and bring desired results when needed. Therefore, this research sheds light on how the relationships between the healthcare professionals affect as a social process the work relationality, with reference to a military hospital. Additionally, leaders in the healthcare market need to have competencies as flexibility and versatility in order to address adverse situations that resemble a battlefield.^{7,19}

Studies report that the medical needs in peace-time are aligned with the needs during armed conflicts and the difference among those environments are focalized in the amount and the speed of medical emergencies, 20 highlighting time, responsiveness and human relational interoperability as significant denominators. Consequently, the main purpose of this study was to evaluate dynamics of leader-member relations in a healthcare organization, in order to explore human interactions and those dynamics that will stretch health organizations to further relational effectiveness. Exploring the benefits of those dynamics will

act as an accelerator towards organizational adaptability to the internal and external environment, resilience in organizational or operational dysfunctionalities,^{21,22} but also as a degree of human resources readiness for potential challenges.⁷

MATERIAL AND METHOD

Participants and procedure

The research was carried out from November 2021 to February 2022 in a military hospital in the region of Attica, Greece with over a 1,000 healthcare employees. The participants were adults (over 18 years), healthcare professionals that have graduated either from the Hellenic Military Academy of Combat Support Officer's (HMACSO) (doctors, veterinarians, dentists, pharmacists, psychologists) and the Military Nursing Academy (MNA) (nurses). In total, 355 hardcopy questionnaires were distributed to 53 supervisors and 160 subordinates using the stratified random sampling method and 343 were returned properly filled by military health professionals who responded, representing a response rate of 96.6%. For the answers to be exploitable for the purpose of this study and subsequently be included in the statistical analysis, the questionnaires had to be filled out by each subordinate and his direct supervisor. However, twenty-three questionnaires completed by twenty-one supervisors and two subordinates were not included in the statistical analysis since the corresponding direct supervisor or subordinate did not participate, respectively, as to ensure the binary interaction. Therefore, the total number of questionnaires that formed the basis of analysis in this study was 320 questionnaires, that is 160 questionnaires filled out by the supervisors and 160 questionnaires filled out by the subordinates as a response to their supervisor's questionnaire, respectively, or the other way round. In this data gathering process supervisors had the largest time-consuming part because they filled up the questionnaire for each of their followers individually. Nevertheless, since in each dyad at least one member is different that makes the dyad and its dynamic unique.^{23,24} The researcher guaranteed the anonymity and confidentiality of all data collected. The completed questionnaires were distributed and collected under the responsibility of the researcher. Participants were allowed to withdraw from the study at any time without proving a reason according to the ethical standards of the Helsinki declaration²⁵ and gave informed consent before starting the survey.

Measurements

Aiming to assess the dynamics of leader-member interactions, anonymous questionnaires were distributed to the military healthcare professionals that had a leader-member relationship and those relations were placed in the COVID-19 pandemic time-frame.

Organizational silence (OS): Adopting the conceptualization that OS is an aggregation of the dimensions, acquiescent silence (AS), defensive silence (DS) and prosocial silence (PS) the measure

comprised of 15 items developed from Van Dyne et al.²⁶ A Likert scale ranging from 1 (never) to 5 (very frequently) was utilized (OS_members α =0.797).

Leader-member exchange (LMX): The LMX measures the quality of leader and member relationships with a 7-item instrument developed by Graen and Uhl-Bien. The tool was measured at a 5-point Likert scale, where 1 corresponds to "not at all" and 5 to "a great deal". Item 7 was measured at a 5-point Likert scale ranging from 1 (extremely ineffective) to 5 (extremely effective) (LMX_leaders α =0.889, LMX_members α =0.887).

Relation identity (RI): Based on the analysis of the levels of self-concept, supervisors and subordinates rated the strength of leader and member RI via the Self-Concept Scale by Johnson et al,²⁷ and specifically via the relational level – concern for others subscale which comprises of 5-items. A Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) was utilized (RI_leaders α =0.708, RI_members α =0.742).

Data processing

Data were analyzed by using the Statistical Package for Social Sciences (SPSS), version 25.0. The Cronbach alpha was performed to evaluate the internal reliability of the questionnaires. Descriptive statistics such as frequencies, percentages, mean and standard deviation (SD) were used. The variables were normally distributed and, in order to explore any differences, parametric tests were chosen. Statistically significant differences between questionnaires and dichotomous variables were investigated using the Student t-test. Also, one-way ANOVA was carried out for the analysis of the differences among variables when examining three or more groups. Pearson's correlation test was applied for the relations between questionnaires. Finally, in order to accept or reject our hypothesis, a simple linear regression model, as well as mediation analyses were performed. The significance level was set at p<0.05.

Theoretical framework and hypothesis development

The level of analysis of this research is placed between the healthcare-leader (supervisor) and the healthcare-member (subordinate) based on the LMX theory.²⁸ This theory claims that the leader-member relationships have the same denominator which includes time (i.e. shared time for open discussions, time spent on detailed work instructions) and resources (i.e. work-tasks, projects, rewards) according to the leader's directions. Hence, part of the team members will develop high quality (in-group) relationship with their leader depending on the amount of the aforementioned time and resources.^{29–32} This kind of relationship will also be characterized by "openness" in communication, higher trust, mutuality and expectations, work engagement and compatibility and in general it is expected that positive attitudes towards the organization will be developed. Besides, the fact that research among healthcare professionals revealed that subordinates feel comfortable speaking up with their supervisors when they believe that their leader trusts and values all team members, ³³ highlights the importance of in-group interrelatedness. Additionally, studies in the military did not affirm a higher LMX being developed between platoon commanders and soldiers when the soldiers' tenure in the army was longer compared to soldiers with shorter service experience. ³⁴ This underpinned the fact that LMX is not a "static" process, but an ongoing exchange of relational "elements" that are dynamically enabled and evolved in this specific context. In comparison to the in-group members, the out-group members share less time and resources with their leader and this type of relationship is expected to exist strictly in-between the job-description boundary. ^{24,35}

In healthcare organizations, leaders still hold a heroic profile (e.g. physician-director of a sector) in the hierarchical structure³⁶ and researches show that the majority of first-line supervisors do not experience an organizational environment of openness in opinion-stating or ideas-expressing as far as employees is concerned.³⁷ Studies reveal that on account of their hierarchical position junior healthcare professionals do not feel listened by their supervisors.33 OS is the phenomenon of withholding ideas or being afraid to speak up is present in healthcare environments²¹ and it is perceived as a dynamic that "disables" rich dyadic interconnectivity.38 Because OS is a holding back of opinions it is perceived in this study as an obstacle in leader-member relationships.7 Supervisors control rewards and other resources, therefore silence (avoid expressing ideas, omitting facts) may lay among LMXs because employees do not want to risk "breaking" the bonds with their supervisor by voicing up feedback or just to protect themselves (DS).39 Moreover, employees may withhold solutions or opinions based on resignation and may be unwilling to exert their voice due to a passive acceptance of the status quo or a lack of constructive intention to make a change (AS).²⁶ What is more, prosocial silence may exist in leader-member interactions and this can be rooted in proactive intentions (PS) towards the organization or intention to benefit other people.^{26,40} The aforementioned silent-ways of reacting to vital leader-member communication are viewed as a social discomfort within organizations and are perceived as communication barriers.

Based on the aforementioned, the following hypotheses are proposed in relation to the healthcare context:^{3,24} OS has negative impact on LMX, AS has negative impact on LMX, DS has negative impact on LMX and PS has negative impact on LMX.

In healthcare organization, silence may be perceived as an informal sub-culture that lies among employees' team-beliefs that may be rooted in common experiences, interests, values or trends.⁴¹ This phenomenon may lead to the deterioration of "speaking up" and learning through this open speaking process and may also lead to a harmful constrain of the ability to detect errors (e.g. malpractices, threats to healthcare quality) and limitation of acquiring crisis-coping methods through the active listening in rich dyad-exchanging.^{21,42,43}

Meta-analytic studies reveal that the quality leader-member

behavioral exchange is positively associated with faster hierarchical promotion, employee's satisfaction and in general members who experience quality LMX tend to remain in the organization (reduced withdrawal process). 7,23,44 This remaining in the specific organization can be perceived either as an elongation of the years of tenure with the direct supervisor or as an extension of space-time where more leader-member work discussions will happen. Moreover, interpersonal relationships require a building up timescale maturation process that is divided into the stranger phase, the acquaintance stage, and the mature partnership, so the amount of time spent in leader-member exchanges is perceived as a relational development.²⁴ This time-dependent maturation process also applies and is activated in identity structuring and at different points in time depending on the nature of the socialstructuring of the levels of self (e.g. individual, relational, collective) or the analysis (e.g. dyadic, collective) of the identity.45

Moreover, in general, the frequency of communication between members that work on a project is considered as a key for coordination⁷ and researches show that the members' interpersonal exchanges and leadership influence the way healthcare professionals decide to engage in "open" communication.³³ Some researches revealed that the first two weeks of a leader-member dyad where not enough job-role episodes may happen due to the short term work-availability can predict LMX at later points of time.⁴⁶ Other studies argued that the density and timing of role episodes in the specific leader-member dyad is an important parameter and therefore an interdependence seems to exist between tenure and communication density within tenure.⁴⁷

Taking into account the aforementioned, the following hypotheses were proposed: The relationship between OS and LMX is mediated by time (where time is meant as years of tenure with the specific direct supervisor) and also the relationship between OS and LMX is mediated by time (where time is meant as frequency of contact and discussion around work between leader-member during a work week).

While silence captures an employee's hesitation for open communication and it is perceived as a burden to be "unloaded" in healthcare organizations, studies revealed that in higher LMX

physicians experience less burnout and the indirect effect of LMX on burnout is significant both for physicians working in the COVID-19 frontline and for those less exposed to the crisis frontline field.⁴⁸ Consequently, enabling quality LMX between healthcare professionals is significant in times of crisis. The level of analysis of the above dyadic interplay is interpersonal and it is placed between leader and member and the environment that this social process occurs.⁴⁵ Additionally, individuals form their relational selves and define themselves through their binary interactions and therefore the building up of relational identity (RI) is based upon the linkages with the specific other individuals that bring along their role-based and person-based elements.^{27,49,50}

Moreover, when leaders report strong RI in their interactions, members also experience high quality relationships (Johnson et al, 2010). In view of the fact that self-worth being is interwoven with the well-being of others, ^{27,51} it is expected that the "dynamic" of RI will mediate the relationship between the silence and the quality of leader-member interactions. In this line of reasoning, the following hypotheses were expected: OS negatively influences LMX and this relationship is mediated by the RI, AS negatively influences LMX and this relationship is mediated by the RI, DS negatively influences LMX and this relationship is mediated by the RI and finally PS negatively influences LMX and this relationship is mediated by the RI.

RESULTS

In the following sections, hypothesis testing results are described both from leaders' and followers' perspectives and therefore the report is organized accordingly.

Description of the sample

The majority of the respondents in the supervisor's and in the subordinate's sample were male. The sample of subordinates had almost equal participation of graduates from HMACSO and MNA (tab. 1). The mean tenure of

Table 1. Socio-demographic characteristics.

	Gender		Age group				Military academy	
	Male	Female	26-34	35-45	46-55	>55	HMACSO	MNA
Number								
Sup	34	19		4	33	16	33	20
Sub	94	66	20	44	81	15	82	78
Percentage								
Sup	64.2	35.8		7.5	62.3	30.2	62.3	37.7
Sub	58.8	41.3	12.5	27.5	50.6	9.4	51.2	48.8

Sup: Supervisors, Sub: Subordinates, HMACSO: Hellenic Military Academy of Combat Support Officer's (doctors, veterinarians, dentists, pharmacists, psychologists), MNA: Military Nursing Academy (nurses)

subordinates' working with the specific supervisor was 34.46 months (SD: 39.192).

Regarding gender, it was shown that there was a significant difference between gender and RI of the supervisors, where female seem to possess a higher relational identity. Additionally, significant differences were found between the gender of subordinates and the LMX and RI, with the women having higher mean in those scales (tab. 2).

Supervisors who belong in the 35–45 age group had higher relational identity than those over 46+. Additionally, a statistically significant difference was shown between the military academy of graduation and the relational identity scale. Therefore, it is proved that supervisors who have graduated from MNA had higher relational identity, compared to supervisors who had graduated from HMACSO (tab. 2). Finally, a statistically difference was found between gender and LMX of subordinates, so it follows that female subordinates view their relationship with their supervisors as more qualitative.

Regarding the frequency of meetings, 65% of supervisors reported that they meet each one of their subordinates and discuss about work at least three days during a work week, while 59.4% of subordinates reported that they meet

Table 2. Gender, age and educational inductive results.

	F	RI	LMX		
	Sup	Sub	Sup	Sub	
	Mean (SD)		Mean (SD)		
Gender					
Male	4.48 (0.41)	3.92 (0.78)		4.50 (0.45)	
Female	4.70 (0.33)	4.19 (0.69)		4.65 (0.39)	
p value	0.001	0.021		0.021	
Age group (years)					
35–45	4.84 (0.36)				
46-55	4.47 (0.45)				
>55	4.63 (0.31)				
p value	0.032				
Military academy					
HMACSO	4.49 (0.41)				
MNA	4.67 (0.35)				
p value	0.005				

Sup: Supervisors, Sub: Subordinates, HMACSO: Hellenic Military Academy of Combat Support Officer's (doctors, veterinarians, dentists, pharmacists, psychologists), MNA: Military Nursing Academy (nurses), LMX: Leader-member exchange, RI: Relation identity, SD: Standard deviation

their direct supervisors three days or more every week. The frequency of meetings with the subordinate has shown significant influence on the LMX (p=0.004) proving that as the frequency of meetings with subordinates' increases, so does the quality of the binary relationship (tab. 3). Moreover, the frequency of meetings with the immediate supervisor has shown significant influence on the LMX, showing that as the frequency of meetings with the supervisor increases, so does the quality of relationship (tab. 3).

In the following sections, hypothesis testing results are described both from leaders' and followers' perspectives and therefore the report is organized accordingly.

No correlation was found between organizational silence of subordinates (hereafter OS_members) and its dimensions with the leader-member relationship theory from the standpoint of supervisors (hereafter LMX_leaders), which means that as the organizational silence of the subordinates increases, the leader-member exchange perception of supervisors is not affected.

OS negatively affects LMX from the standpoint of members (LMX_members) (r=-0.255, p=0.001) and its dimensions AS (r=-0.308, p=0.0001) and DS (r=-0.287, p=0.0001), except from the PS (r=0.062, p=0.436), were negatively correlated with LMX_members, respectively. Therefore, the hypotheses: OS has a negative impact on LMX, AS has negative impact on LMX and DS has a negative impact on LMX, were supported from the members' perception. Moreover, the linear regression method showed that OS (independent variable) negatively affects LMX_members (dependent variable) (b=-0.365, p=0.0001), as well as AS (b=-0.236, p=0.0001) and DS (b=-0.271, p=0.0001) of subordinates.

Furthermore, OS_members does not affect the frequency of meeting of the leader with the member (p=0.5140).

Table 3. The influence of the frequency of work meetings in dyadic relationships both from the standpoint of supervisors subordinates.

Work meetings with the	LMX			
supervisor or the subordinate during a week	Sup	Sub		
during a week	Mean (SD)			
Never		3.23 (0.75)		
Rarely (once a week)	3.63 (0.72)	3.76 (0.71)		
Occasionally (twice a week)	3.89 (0.65)	4.08 (0.61)		
Frequently (3 or 4 times a week)	4.05 (0.47)	4.18 (0.71)		
Every day	4.19 (0.65)	4.20 (0.74)		
p value	0.004	0.001		

 $LMX: Leader-member\ exchange, Sup: Supervisors, Sub: Subordinates, SD: Standard\ deviation$

Therefore, the relationship between OS_members and LMX_leaders was examined and it was found that the frequency of meetings of those meetings do not mediate the aforementioned relationship; therefore, the hypothesis that the relationship between OS and LMX is mediated by time (where time is meant as frequency of contact and discussion around work between leader-member during a work week), was not supported from the standpoint of leaders.

Then, it was hypothesized that the relationship between OS_members and LMX_members is mediated by time. Initially, "time" was viewed as the tenure with the leader that is how long (months, years) is a member working with the specific direct supervisor. Results showed that OS_members does not affect the tenure with the specific leader (p=0.3173). Therefore, tenure under the direct leader does not mediate the relationship between OS_members and LMX_members and the hypothesis that the relationship between OS and LMX is mediated by time, was not supported from the standpoint of members.

Moreover, time was examined as the frequency of contact with the leader that is how often during a work week employees meet with their immediate leaders and discuss around work. The examination revealed that OS_members negatively affects the frequency of meeting with leaders (p=0.0568, b=-0.3332). Moreover, OS_members negatively affects LMX_members (p=0.0002, b=-0.3650). What is more, OS_members negatively affects LMX_members (b=-0.3085, p=0.0013), while the frequency of meetings with their leaders affects it positively (b=0.1695, p=0.0001). At this point, it was investigated whether the frequency of meetings with the leaders mediates the relationship between the OS_members and the LMX_members, by conducting a mediation analysis. The results showed that the overall effect of the model is significant (b=-0.3650, p=0.0002). The direct effect of OS_members in the presence of the mediator was also found to be significant (b=-0.3085, p=0.0013). In addition, the bootstrap analysis showed that BootLLCI -0.1408 and BootULCI 0.0105 are significant and the indirect effect of the impact of OS_members on the LMX_members was estimated at b=-0.0565 (fig. 1). Therefore, the frequency of meeting with the leader partially mediates the relationship between OS_members and the LMX_members and the hypothesis that the relationship between OS and LMX is mediated by the frequency of leader-member contacts, was supported from the standpoint of members.

Based on the hypothesis that OS negatively influences LMX and this relationship is mediated by the RI it was found that OS_members does not affect the relational identity of leaders (RI_leaders) (p=0.0930), therefore it

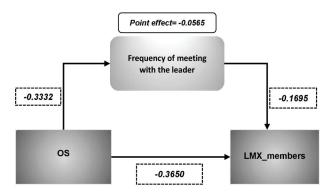


Figure 1. Mediation analysis of the frequency of meeting of the member with the leader in the relationship of organizational silence (members) (OS) and LMX_members (point effect).

does not constitute a mediating factor in the relationship between OS_members and the LMX_leaders. Additionally, the aforementioned hypothesis was investigated with all the dimensions (AS, DS, PS) of OS separately. As it turned out, AS_members negatively affects the RI_leaders (p=0.0286, b=-0.0742). Yet, the AS_members does not affect LMX_leaders (p=0.0643), therefore the hypothesis that AS negatively influences LMX and this relationship is mediated by the RI, was not supported from the standpoint of leaders. Furthermore, more hypotheses were tested in terms of the dimensions DS and PS and it was found that those do not affect RI_leaders with p=0.1618 and p=0.8456, respectively, therefore RI_leaders does not constitute a mediating factor and those hypotheses were also not supported.

As far as the hypothesis OS negatively influences LMX and this relationship is mediated by the RI is concerned the OS members does not affect the relational identity of members (RI_members) (p=0.9222); therefore, RI_members does not constitute a mediating factor. In addition to the aforementioned hypothesis was investigated as the effect of AS, DS and PS. It was shown that AS_members negatively affects RI_members (p=0.0047, b=-0.1027) and LMX_members (p=0.0002, b=-0.2357), respectively. The AS_members negatively affects LMX_members (b=-0.2197, p=0.0006), while the RI_members does not affect LMX_members (p=0.2533). In order to investigate whether RI_members mediates the relationship between AS_members and LMX_members, a mediation analysis was conducted. The results showed that the overall effect of the model is significant (b=-0.2357, p=0.0002). The direct effect of AS members in the presence of the mediator was also found to be significant (b=-0.2197, p=0.0006). In addition, the bootstrap analysis showed that BootLLCI -0.0532 and BootULCI 0.0125 are significant and the indirect negative effect of AS_members effect on LMX_members

was estimated at b=-0.0161 (fig. 2). Therefore, RI_members has partial negative mediation in the relationship between AS_members and LMX_members, supporting that AS negatively influences LMX and this relationship is mediated by the RI, from the standpoint of members.

Moreover, defensive silence does not affect RI_members (p=0.0876). So, RI in this case is not a mediating factor and the hypothesis that DS negatively influences LMX and this relationship is mediated by the RI, was not supported. Ultimately, it was found that PS_members positively affects RI_members (p=0.0001, coeff=0.1601). Yet, PS_members does not affect LMX_members (p=0.9380), so the hypothesis that PS negatively influences LMX and this relationship is mediated by the RI was not supported.

All in all, hypotheses that were supported from the standpoint of members were: OS has negative impact on LMX, AS has negative impact on LMX, DS has negative impact on LMX, the relationship between OS and LMX is mediated by the frequency of contact between leader-member during a work week and finally AS negatively influences LMX and this relationship is mediated by the RI. Yet, the aforementioned hypotheses were not supported from the standpoint of leaders.

DISCUSSION

In this research it was argued that organizational silence is a communication hindrance with an impact on the quality of leader-member relationship and is perceived as relational defective interaction, ^{22,37,52} especially in military healthcare organizations that are characterized as hierarchical and complex systems. ^{7,21,36,53} Research findings indicate a clear evidence of the negative influence by the "silence" behavior of subordinates on the vertical dyad linkage (VDL)²⁸ that are considered as basic organizational unit of analysis the

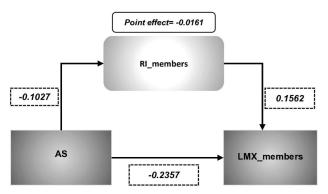


Figure 2. Mediation analysis of relational identity members (RI_members) on the relationship between acquiescent silence (members) (AS) and LMX_members (point effect).

relationship between the leader and each of his(her) individual members. Those findings coincide with researches in the past which mentioned that the majority of first-line managers did not see their organizations promoting employees to adopt "voice" behaviors, 37,54,55 and specifically in bureaucratic healthcare settings.²¹ The more healthcare organizations cultivate silent environments the less quality LMX relationships will be formed, leading to a relational dysfunctionality and mistrust;7,21 therefore constraining the ability to detect medical errors and engage mutual learning as a process of coping in crises.38 What is more, the fact that prosocial silence does not influence LMX from the standpoint of subordinates is congruent with previous studies that examine prosocial motives and describe this dimension of silence as proactive towards the relational cooperation, aiming at benefiting other people^{26,52,56} and positively related to organizational commitment in the military environment.53

In addition, based on the Graen and Uhl-Bien²⁴ report of the three stages ("stranger", "acquaintance" and "mature" phases) in the relationship development of leader-member exchanges it was hypothesized that the amount of time spent on these stages would mediate the relationship between silence and LMX communication. Results showed that the tenure of the subordinate with the specific supervisor does not influence the relationship between the suppression of speaking up³⁷ and the leader-member exchanges. Findings are congruent with prior researches where relational tenure showed no significant correlation with leader-member exchanges. 57 Additionally, when the denominator "time" was examined as the frequency of the leader-member communication during the work-week it was proved that qualitative time meant as number (density) of leader-follower work-meetings during the years their relationship lasts, is a significant interplay dynamic.7 This result coincides with studies that view work experience through the lens of density of the assigned projects and not just through the time-period that an individual works in a specific position.⁴⁷ Therefore, leaders are urged to form channels of both-way dialogue with their subordinates that are characterized by openness in opinion expressing, 35-39 enhancing incident reporting,58 discussions, role-playing and learning through the process in the healthcare environment.59 Attention should also be paid to the fact that, inferential analysis in this study showed when the frequency of leader-member meetings increases, so does the quality of their binary relationship, both from the leader's and member's perception.

Extending the conceptualization of silence, attention should be drawn on the fact that when employees think that

information sharing with the leader is pointless (acquiescent silence), that has a negative impact on the affective and motivated relational self of leaders. ^{7,52} In view of the fact that, the interpersonal level of leader-member exchanges is often examined focusing on the followers' self-conception by assuming that followers are more susceptible by leadership processes, this result enriches existing studies that examine the dual impact on this level. ⁴⁵ Additionally, results for subordinates gave prominence to relational identity, viewing it as a "key" dynamic for enhancing communication during the maturation process of growing developmental stages of leader-member interactions. ^{47,24,57}

As it turned out, relational identity has a full mediation between the negative influence of withholding of information on work-related issues based on disengagement ^{52,60} and the trust that healthcare workers develop based on evidence of trustworthiness of the other person. ^{61,62} That is, when it comes to trustworthy relationships ⁶¹ the way interpersonal interactions with the specific individual are formed have an even greater role on "absorbing" the negative influence of hesitation in participating in organizational discussion. The latter is perceived as essential in healthcare settings where incident reporting communication is vital. ^{52,58}

Limitations and future research

Evidence that has emerged from this study should be interpreted in light of some limitations. To begin with, the data was obtained from a military hospital, thus it is difficult to generalize results to the broader population in Greece. Further investigations in larger scale studies should be performed to provide more representative findings. Moreover, despite the fact that the questionnaire was anonymous and self-administered, the possible subjectivity and bias (which increases the possibility of a common method bias/variance [CMV]) of the sample responses should be noted.

Moreover, this is a cross-sectional study which was conducted in the COVID-19 crisis framework and diversifies the understanding of the causal relationship between LMX; thus, a longitudinal perspective is highly recommended for future research. Additionally, drawing from the fact that leadership is born and enabled among relationships and the latter are based on communication, it is recommended that future researches in organizations focus on how to address the phenomenon of the "sea of silence" by examining relationships at all levels of analysis (larger collectivities, leaders higher in the hierarchy or at different levels of hierarchy, etc.)^{7,63} or by the grade that supervisors support silence in the name of having employees that correspond to their orientation.⁶⁴

Additionally, as leadership is not a rank but a dynamic relational process that takes place in the specific context, this research underscored the importance of viewing leadership beyond just measuring the quality of leadermember exchanges based on a static concept.3,7 That is, leadership was examined based on the cause (dynamics) and effect (relationships)' interactive concept by exploring the relational dynamics that develop among healthcare professionals throughout the military workplace,^{22,65} yet this was a snapshot of interactions in time. As the procedure of collecting data from leader-member pairs is time-consuming for supervisors, it restrained the will to participate. 65,66 Additionally, COVID-19 conditions in the hospital deteriorated further the proximity of potential participants, therefore it was overall difficult to establish a larger sample.66

Moreover, since relational identity in this research appears as a significant relational dynamic that enhances open communication, supports work friendship, restraining the inclination towards silence^{7,21} more light should be shed on every social process of forming identity, such as the relationship with the patient, the co-worker or inter-groups.⁶⁸

In addition to that, there is an emphasis placed on human relational interactions when looking at the disaster mosaic around the globe, where human unity and solidarity is most needed. The interdependencies and the dynamics that are developed in the space of the bidirectional human interactions of healthcare professionals can be explained by the social exchange theory considering both the dyadic leader-member relationship and the existing or emerging dynamics in healthcare environment around them. 3.11,14,24

In conclusion, this research revealed for both leaders and members a significant relationship between the frequency of work meetings during a week and the level of their mutuality. Drawing from that fact, it is strongly suggested that leaders retain those channels of communication at the top of their agenda and move away from the perception of enduring boring meetings on an every-day basis. Moreover, since relational identity in this research appears as a significant relational dynamic that enhances open communication and restrains the tendency towards silence, light should be shed on every social process of forming identity, such as work-friendships and inter-groups environment. In times of crisis, the military healthcare sector is underpinned by the fact that members carry the implicit duty to risk one's life to meet organizational goals, by an actual common sustain of hardship which significantly marks interpersonal bonds and ties and lastly by the fact that military lead-

ers are emerged from the ranks of their organization.²² The aforementioned three characteristics of sacrifice, resilience, trust in the self-creating system of leaders in the military healthcare organizations are considered as highly interesting on leadership behavioral studies and therefore of high-interest to further explore.

Besides, military researches in the past are insightful of the way leaders can sustain their perceptual way of thinking for future security challenges or crises by combining a successful completion of the mission and concurrently to conserve of human resources (e.g. human relationships) that will play part in the next missions where emergency health-management mechanisms will be activated. 19,224,868 By virtue of the fact, that studies during after the World War II, Korean or Vietnam wars accented that combat per-

formance and leadership effectiveness relies on morale, cohesion, and esprit de corps, ^{13,68} leaders' agenda should include "components" as team-bonding and trust-based relationships.

All in all, from spring 2020 and onwards, the COVID-19 pandemic has had a significant impact on the healthcare sector, the business world and the society, at once.⁴⁸ Human interactions in the military healthcare settings are underpinned by staff which is trained in crisis times to ensure order, process and promptness through team cohesion and unity in order to get the job done.⁶⁸ Therefore, extracting leadership knowledge from this environment can provide the broader healthcare organizations with a wealth of information and draw conclusions in order to optimize their leadership processes.

ΠΕΡΙΛΗΨΗ

Η διεπαφή ηγέτη-μέλους σε στρατιωτικούς οργανισμούς υγειονομικής περίθαλψης: Η αλληλεπίδραση των σχεσιακών δυναμικών

Ε. ΜΑΡΙΤΣΑ, 1 Α. ΓΟΥΛΑ, 1 Α. ΨΥΧΟΓΙΟΣ, 2 Δ. ΛΑΤΣΟΥ, 1 Γ. ΠΙΕΡΡΑΚΟΣ 1

¹Τμήμα Διοίκησης Επιχειρήσεων, Πανεπιστήμιο Δυτικής Αττικής, Αθήνα, ²Business School of Loughborough, University of Loughborough, Loughborough, Ηνωμένο Βασίλειο και ALBA Graduate Business School, The American College of Greece, Αθήνα

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ΣΚΟΠΟΣ Διερεύνηση της δυναμικής των δυαδικών αλληλεπιδράσεων, καθώς υποστηρίχθηκε ότι οι σχέσεις ηγέτημέλους διαμορφώνονται και εξελίσσονται ως μια κοινωνική διεργασία αλληλοεξαρτώμενων δυναμικών, οι οποίες με τη σειρά τους διαμορφώνουν την ποιότητα αυτών των σχέσεων στο συγκεκριμένο κοινωνικό πλαίσιο. ΥΛΙΚΟ-ΜΕ-ΘΟΔΟΣ Διεξήχθη δειγματοληπτική ποσοτική έρευνα σε στρατιωτικό νοσοκομείο, όπου οι 53 ηγέτες και τα 160 μέλη που συμμετείχαν σχημάτισαν 160 δυαδικές σχέσεις. ΑΠΟΤΕΛΕΣΜΑΤΑ Διαπιστώθηκε ότι η δυναμική των σχέσεων που υπάρχει στο πλαίσιο της στρατιωτικής υγειονομικής περίθαλψης διαμορφώνει την ποιότητα των σχέσεων ηγέτημέλους, επηρεάζοντας κατ' αυτόν τον τρόπο την αποτελεσματικότητα της ηγεσίας. Φάνηκε επίσης ότι η ενσυνείδητη αποφυγή έκφρασης απόψεων και προτάσεων από τους υφισταμένους όσον αφορά στα εργασιακά θέματα επηρεάζει αρνητικά την αντίληψη των μελών για την ποιότητα της σχέσης τους με τους ηγέτες και το εν λόγω αρνητικό φαινόμενο στις σχέσεις μπορεί να μετριαστεί με τη δημιουργία ισχυρών σχεσιακών ταυτοτήτων και με την αύξηση της συχνότητας των συναντήσεων ηγέτη-μέλους. ΣΥΜΠΕΡΑΣΜΑΤΑ Η κατανόηση της δόμησης των κοινωνικών σχέσεων ενισχύθηκε δίνοντας έμφαση στην ύπαρξη ορισμένων δυναμικών (σχεσιακή ταυτότητα, οργανωσιακή σιωπή και συχνότητα των εργασιακών συναντήσεων) που επηρεάζουν τις σχέσεις ηγεσίας μεταξύ των στρατιωτικών επαγγελματιών υγείας. Τα ευρήματα της μελέτης υποστηρίζουν την άποψη ότι η ενίσχυση της αυτοεκτίμησης μέσω ποιοτικών αλληλεπιδράσεων ηγέτη-μέλους και η υποστήριξη της «ανοικτής» επικοινωνίας συνιστούν θεμέλιο της αποτελεσματικότητας της εργασίας στους οργανισμούς υγείας.

Λέξεις ευρετηρίου: Διεπαφή ηγέτη-μέλους, Οργανωσιακή σιωπή, Σχεσιακές δυναμικές, Σχεσιακή ταυτότητα, Στρατιωτικό νοσοκομείο

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Corresponding author:

E. Maritsa, Department of Business Administration, University of West Attica, 122 43 Athens, Greece e-mail: eva-maritsa@hotmail.com

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