Managing *TQM*'s soft side: an explorative study of social care multiservice organizations

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Abstract

Purpose – This paper explores total quality management (TQM) soft domain efficacy in social care organizations to determine the extent to which an organization's project success may stem from soft TQM critical success factors (CSFs).

Design/methodology/approach – Non-structured interviews were conducted with 16 managers overseeing the prosthetic device regeneration project of the Italian local health unit (located in Salerno) to explore which soft factors could contribute to the success of a social care multifunctional organization.

Findings – Organizations' handling of certain projects, such as pivoting on soft TQM issues, may allow them to be configured as multiservice organizations. Therefore, a conceptual model of a multiservice social care organization is proposed.

Practical implications – From a managerial perspective, this study presents an interesting success case of a multiservice social care organization with a total annual expenditure of €20 million on prosthetic assistance. Preliminary data show a 13% reduction in public expenditure for Salerno's local health unit via a refurbishment project.

Originality/value – The paper contributes to the soft TQM literature debate: although Italian local health professionals appear aware of soft TQM issues' implementation and consciously apply them in their organization and projects, this occurs more with specific CSFs emerging from the literature. Therefore, this article paves the way for further quantitative and theoretical investigations on the adoption of TQM soft issues in social care organizations' performance measurement.

Keywords Total quality management, Health care, Organizational processes, Organizational performance, Service quality, Organizational change

Paper type Research paper

1. Introduction

Managing service ecosystems is a complex process that is required to control quality and gain a competitive advantage "through greater customer satisfaction and superior performance" (Aquilani *et al.*, 2017, p. 186). Total quality management (TQM) is a comprehensive "organization-wide effort to improve the quality of products and services"

(Evans and Dean, 2000, p. 5). According to Flynn *et al.* (1995, p. 660), quality management is an integrated "inter-functional means of achieving and sustaining competitive advantage." While this cross-functional concept strengthens the organizational components needed to interact with and reorganize a service's offerings according to its functional structure, it raises the question of how this could be accomplished. The answer may be to address several factors, the most important of which is employees' direct engagement in improving project processes.

Organizations regularly create ad hoc and temporary teams to improve activities. These can include quality circles, task forces, problem-solving groups and customer response groups. Implementing an effective TQM system may help organizations reach their goals. Lau and Idris (2001) suggested that contextualizing critical success factors (CSFs) by exploring the "soft" TQM dimension could be a consistent approach to choosing the most effective factors for thorough service evaluation.

In crises such as the current pandemic, organizations can reach a critical point. To survive, they need to improve their service efficacy and variety or risk losing their viability. If they work jointly with their upstream and downstream stakeholders and members, they must facilitate and strengthen their knowledge and integration of resources (Prakash and Srivastava, 2020) from the external environment to achieve better performance. Thus, the shift from service organizations to multiservice organizations depends on the extent to which they successfully implement quality management practices. Because of this holistic shift, the results of TQM research do not always allow the identification of replicable CSFs in TQM implementations.

Organizations can improve their workflow, unlock their capacity to play different roles and meet growing demands in society. Above all, social care ecosystems are strongly based on organizational interactions in multilevel scenarios, where relationships should be managed "as part of a complex system" (Secundo *et al.*, 2019, p. 145), and interactions occur among components that generates new unpredictable capabilities that are not inherent in any of the parts acting alone (*Ibidem*). Indeed, social care is a special field of inquiry, as shreds of evidence show us a natural, and sometimes even unconscious, predisposition to implement structured TQM plans for continuous quality improvement of care services (Bröchner *et al.*, 2016).

In addition, they are very sensitive to process optimization and waste hunting to make the patient's experience in health service as comfortable as possible.

Given the fragmented nature of TQM initiatives across social care systems, the empirical literature on social care does not provide insights into what soft TQM success factors might be leveraged for quality improvement in care services. Therefore, this study aims to enrich the current debate on TQM's "soft side" in social care ecosystems and show that it may be the ideal sphere for the CSFs of multiservice evaluations. This contribution to the literature explores a complex and dynamic scenario of social care to determine the most effective factors that discuss the success of an organizational project. The following research question (RQ) was formulated to guide the study:

RQ. *Which soft TQM CSFs determine the success of a project in social care organizations*?

The article is organized as follows. Section 2 proposes the conceptual background against which this research was established. Section 3 depicts the study design and provides some information about the in-depth case study investigated. Section 4 reports the study findings and provides some answers to the research question depicted above. Section 5 critically discusses the study findings and advances the main conceptual and practical implications of this research, which are outlined in Section 6, where conclusions and a research agenda are presented.

2. Literature review

2.1 TQM: a general definition

TQM has been defined as "an approach to improving the effectiveness and flexibility of an organization. It is essentially a way of organizing and involving the whole organization; every department, every activity, every single person at every level" (Oakland, 1989, p. 14). This definition conveys the idea that TQM is a multidimensional mechanism that promotes the better functioning of organizations and enables them to gain a competitive advantage (Gimenez-Espin *et al.*, 2013). Several scholars have defined TQM as the effort to establish high-quality services through a continuous of improvement and to prevent dysfunction at all organizational levels (van Assen, 2021). The multidimensionality concept emphasizes different classifications of TQM elements (Ali and Johl, 2022). According to Dahlgaard-Park *et al.* (2018), TQM aims to continuously improve services and processes and exceed customers' expectations through the involvement of the entire organization.

The principle of outward orientation includes interacting with customers to understand environmental stimuli. Employees must respond dynamically to customers' needs to enhance their satisfaction. Therefore, employees must participate in the external environment to gather information about customers 'expectations. Continuous improvement (CI), which emerged in the 1990s as a core property of both TQM strategies and organizational design (Lillrank, 1995), promotes adaptation to changing requirements at the organizational operative level and is a tool for enabling meaningful employee participation. CI occurs when workplaces allow employees to invest in training. Improvement is part of the work experienced as an added value over time (Lee and Lee, 2022). Therefore, organizations that encourage CI benefit from the interlinked processes and operations of the services they offer.

TQM also requires a strong bond between team input and work process performance, which depends on employees' talent, work experience, skills and knowledge (Puthanveettil *et al.*, 2021). The emergence of this attitude in a total quality environment should supersede individual expectations and evolve into a global team vision, which will then break down barriers among individuals, offices, and line and staff functions. According to Dale *et al.* (2007), this process is due to management's role in ensuring that stakeholders (i.e. employees, customers and suppliers) receive effective training in working synergistically rather than individually.

These principles are supported by various techniques, such as statistical controls and fishbone diagrams (Koripadu and Subbaiah, 2014). Nevertheless, TQM elements are not merely statistics. Several intangible elements are involved, such as leadership, corporate culture, commitment, teamwork and empowerment.

2.2 Hard versus soft factors of TQM

Scholars have recognized two categories of TQM factors: "hard" (technical) and "soft" (social) (Ali *et al.*, 2022). They emphasized the role of soft issues in enacting organizational improvement. A recent debate observed that TQM soft factors may significantly affect customer behavior and service innovation; thus, they can be considered CSFs of organizational performance (Eshadi *et al.*, 2019). Imeri *et al.* (2014) provided a general classification of hard and soft TQM elements. Regarding soft TQM, the authors identified several dimensions that organizations utilize to implement their TQM evaluation plans, including total employee involvement, CI, strategic quality planning (SQP), continuous training, teamwork, empowerment, customer satisfaction, information, analysis, supplier management, top-management commitment and support, a democratic management style and cultural change (Imeri *et al.*, p. 10). This list reflects the range of TQM soft categories that have been the most often addressed by scholars, such as communication (Alzoubi and Ahmed, 2019), teamwork (Snongtaweeporn *et al.*, 2020) and empowerment (Glaveli *et al.*, 2022), although they have not

always been implemented consistently. These constructs are similar, particularly in service ecosystems: because a quality integration plan is based on an innovative and democratic system implementation ratio, organizations need to involve their employees in various project stages, sometimes including decision-making, to achieve innovation (Santos *et al.*, 2019). Moreover, organizations should focus on the customer's perspective to overcome a top-down direction in favor of a more effective bottom-up orientation that allows staff to experience customers' environmental issues.

2.3 Soft TQM in service ecosystems

In service ecosystems, employees' experiences, skills and behaviors should be involved in co-design. The soft, or social, side of employees' behaviors and attitudes is pivotal in testing TQM methods (Cooney and Sohal, 2003). Process-oriented TQM logic does not always support a project's success, such as when continuous tasks and the redesign and improvement of quality procedures are required, because the more challenging the services, the more organizational teams require a broader range of skills and coordination to manage them. Hence, not only employees but also managers need training in implementing the new paradigm of technical and soft orientations to contribute to quality improvement and the redesign of organizational systems (Kwan *et al.*, 2022).

A benchmarking analysis of existing best practices and processes should aim at producing value-in-use for all actors involved as well as the organization. Co-creation occurs when partners participate in service design because they play active roles and may benefit from this cooperation (Aquilani *et al.*, 2016), which may help organizations co-evolve their services and unlock further financial resources, especially in the public sector.

In addressing service ecosystems, for which a wide range of customer inquiries must be afforded, staff experience, as well as dialogical and strategic skills, should be included in the system's design because the soft side of employees' behaviors and attitudes is a core asset related to the design and testing of TQM methods (Cooney and Sohal, 2003). Process-centered TQM logic does not explain successful tasks that require the continuous redesign and improvement of organizational jobs and quality procedures (Szelągowski and Berniak-Woźny, 2019). TQM logic occurs because more challenging services require teams that have a broader range of skills and coordination. To respond flexibly in providing multi-services, skills in the soft dimension of TQM (e.g. communication, teamwork and empowerment) require higher training. Thus, employees and managers require training to manage the new paradigm in their technical and social discursive roles to contribute to quality improvement activities and the redesign of organizational systems.

2.4 Quality in social care ecosystems: a gap to fill

The concept of social care was studied by scholars in the USA in the early 1970s as a widespread practice in social care organizations. In the UK, quality criteria, premia and incentives have been implemented over time through local authority initiatives in social care (Hardy and Wistow, 1998; Rubery *et al.*, 2013), as well as in Sweden, which distinguishes between healthcare and social care. Separate legislations for health and social care were formulated, according to which county councils are responsible for health-related services and municipalities are responsible for social care initiatives (Bröchner *et al.*, 2016). In Finland's social care system, TQM has been criticized because it is oriented toward curative actions rather than preventive measures (Alanen, 1996). Particularly in the USA, Japan and Europe, the issue of quality in social care concerns specific social services that have a health component, such as long-term care. According to Donabedian (1988), service quality requires three conditions: service structure (i.e. human resources, financial resources, infrastructure

and activities), service process (i.e. stakeholders' involvement and supplier management), and outcomes (i.e. measured by quantitative and qualitative indicators).

Social care organizations are both effective and efficient in delivering high-quality services to users, involving staff who possess a positive attitude toward acquiring knowledge (i.e. continuous improvement), working in teams and dealing with the external environment (Blumenthal, 1996). When poor systems and procedures are inadequately integrated with customers' needs and employees' skills, adverse effects on people's care and well-being occur. When patients are left without adequate information and empowerment regarding the services provided, social care organizations struggle to meet their needs and fulfill their goals (Baguma and Uchejeso, 2020). However, the implementation of TQM principles in social care organizations implies changes and innovations in organizational cultures, tools and techniques to ensure active involvement and continuous professional improvement in the quality-of-service process (Ghenţa *et al.*, 2014). In social care organizations, TQM is widely adopted to increase service efficiency, such as cost containment and effectiveness, as well as the quality and appropriateness of care (Counte *et al.*, 1992). Because of its encouraging results in other industries, TQM has penetrated both health and social care organizations, overcoming to some extent the barrier to preventive actions (Malley *et al.*, 2012).

Several concepts have been associated with quality in the social care environment, which differs from the perspectives of various stakeholders (Adinolfi, 2003). Stakeholders are both internal and external entities, such as employees, managers, customers, suppliers and institutions, who have an interest in an organization's performance. Mäntysaari (1998). Therefore, their inclusion is consistent with investigating the quality of social care by focusing on the customer's perspective. Indeed, in social services, TQM particularly stresses the customer's role in defining quality. The customer has the final word on service quality, which is "defined by referring to the customer's needs. Therefore, it is vital to give the customer possibilities to express his or her needs, to articulate them" (Mäntysaari, 1998, p. 13). According to Eichhorn, 1978, p. 6), health and social care issues "have become defined in complex and multi-faceted terms. Health organizations have discovered it is necessary to have the information and skills of many disciplines to develop valid solutions and deliver comprehensive care to individuals and families." In other words, social care teams and organizations should be addressed as multidisciplinary and multiservice agents who are capable of meeting multiple needs. Firth-Cozens (1998, p. 3) reinforced this view, defining teamwork as managing "the potential fragmentation of care; a means to widen skills; an essential part of the need to consider the complexity of modern care; and a way to generally improve quality for the patient."

In short, TQM in social care settings faces the same problems as those faced in health care. Nevertheless, there is a consistent discrepancy between the literature on soft TQM and its current application in social care, in contrast to healthcare. It appears that soft TQM initiatives in social healthcare are fragmented and not continuous, given their precarious nature related to single managerial and time-limited initiatives. Moreover, TQM projects in social care are often not repeated due to exogenous and endogenous circumstances (managerial approach of the health care facility, sensitivity to TQM, organizational contingencies, ecosystem crisis, etc.).

While in practice, social care projects unconsciously have included the implementation of TQM approaches, few contributions to the literature have focused specifically on this gap (Baguma and Uchejeso, 2020; San Miguel *et al.*, 2016). Thus, no clear direction emerges on the CSFs of implementing soft TQM plans: stakeholder relations, management style, or the direct involvement of employees in processes. Nevertheless, this diversity in the social care approach determines a particularly interesting field of investigation that can enrich the TQM debate in the literature.

3. Research methodology

3.1 Research design

This investigation explores the relationality and coordination between internal components and the external environment. Recent studies have shown that a qualitative methodology is appropriate for an exploratory study (Abbasi *et al.*, 2022) in organizational research. According to grounded theory (Corley and Gioia, 2011), human understanding and actions are based on personal interpretations of reality and events through individual experiences. The steps used in the present case study are shown in Figures 1 and 2.

An in-depth case study and contextual analysis (Yin, 1993, 1994) were conducted on data collected from contexts, actors, tools and processes. To Yin (2013), empirical evidence can be depicted even by adopting single case study, if the resultant observations are derived from a detailed and all-encompassing analysis of the constructs and meanings of the field of inquiry. In line with TQM analysis (Reitsma *et al.*, 2021; Pellegrino *et al.*, 2020), this approach is described as appropriate for the purpose of the research.

Data were collected from in-depth semi-structured interviews with 16 members (i.e. managers and employees) of the prosthetic device regeneration project carried out by a local health unit (ASL). The entire project timeline (2018–2019) was addressed, as well as the whole sample of project participants (n.16 professionals) was considered adequate to fulfill this research aim. Moreover, the responses of all participants in charge implementing TQM in the project were included in the data analysis. The interviews were conducted between June and September 2019, and their durations differed according to the respondent's role. Given the project's stop due to the pandemic, the analysis comprised all available data on the available prosthetic aids' reconditioning project. To date, all soft TQM initiatives in the project have been considered.

In designing the interviews, the authors followed Georgiev and Ohtaki's (2019) model based on CSF identification, to determine the elements that constitute soft TQM dimensions and to categorize them in soft TQM domains. This model has been adopted in previous

CSF N.	CSF description	Items description
F.1	Total Employee Involvement	(I.1) Tasks and responsibilities delegation for the project steps success/failure (Belassi, & Tukel, O. I., 1996)
F.2	Continuous Improvement	(I.2) The organization wide process of focused and continuous incremental innovation (Bessant *et al.*, 1994)
F.3	Strategic Quality Planning	(I.3) Organization and control procedures in project steps over time (Waithanji Ngware *et al.*, 2006)
F.4	Continuous Training	(I.4) Tools and practices know-how used for staff skills and competencies improvement (Jung, *et al.*, 2009)
F.5	Teamwork	(I.5) Behaviors in teamwork, typologies, interactions, and performance (Coyle-Shapiro, 1995)
F.6	Empowerment	(I.6) Employees' empowerment goes hand in hand with project steps development (Ugboro & Obeng, 2000)
F.7	Customer Satisfaction	(I.7) Customers feedback as quality indicators of project development (Choi & Eboch, 1998)
F.8	Information & Analysis	(I.8) Analysis of information about customer needs, operational problems, and the success of improvement attempts (Samson & Terziovski, p.397)
F.9	Supplier Management	(I.9) Relations occurring with suppliers (e.g. partnerships, furniture, deadlines, Hing Yee Tsang & Antony, 2001)
F.10	Top-Management Commitment and Support	(I.10) Top management behaviors towards employees and project follow up (Soltani, 2005)
F.11	Democratic Management Style	(I.11) A successful TQM implementation requires employees' engagement in extra-role behaviors (Yeh, 2003)
F.12	Culture Change	(I.12) Tangible processes and activities that permeate the organization and that should be geared to improved performance (Atkinson, 1990, p.37)

Figure 1.
Interview design

Source(s): Adapted from Gioia and Chittipeddi (1991)
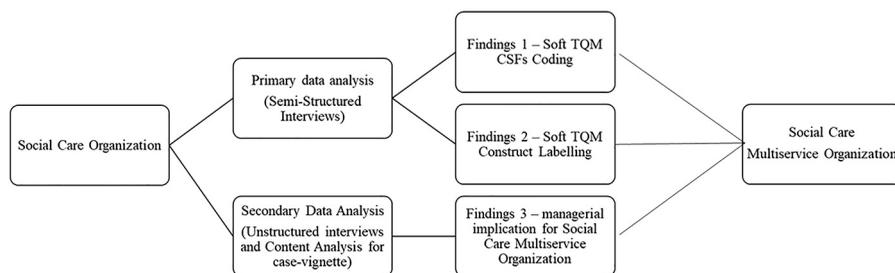
Source(s): Adapted from Georgiev and Ohtaki (2019)

Figure 2.
Interview design

qualitative research (Karcher and Jochem, 2015) and is considered adequate for replication in empirical research.

The authors queried the n.12 constructs of the Soft TQM according to Imeri *et al.*'s (2014) classification of CSFs, to determine whether these issues—and which ones—affect the success or failure of a project evaluation based on TQM soft factors. The responses to questions about CSFs were labeled as specific soft TQM domains, following previous qualitative TQM studies in the literature (Sternad *et al.*, 2019; Antony *et al.*, 2021).

The findings presented a "photograph" (Gehman *et al.*, 2018) of the project's impact on the external environment. Through manual coding of the interview data, findings on secondary soft TQM CSFs emerged, as well as preexisting categories of soft TQM in which they were included. They were derived through content analysis (Krippendorff, 2004) to operationalize the soft TQM domains that emerged from the survey, which is in line with recent studies on this topic (Souza *et al.*, 2020). The responses were grouped, synthesized and coded into a single narrative before grouping them into representative clusters which could be useful in future qualitative and quantitative studies (Linneberg and Korsgaard, 2019, 2021).

3.2 Secondary data analysis: project insights

The Italian National Health Service (SSN) guarantees health assistance for those recognized (or awaiting recognition of their invalidity) as disabled, including the provision of prostheses, orthoses and technological aids for the prevention, correction, or compensation of impairments or functional disabilities resulting from pathologies or injuries, the enhancement of residual skills and the promotion of a person's autonomy. Prosthetic assistance is provided through individual rehabilitation care plans, prescriptions, authorization, delivery, testing and follow-up. In Italy, regions adopt suitable measures to simplify and facilitate this procedure to avoid unnecessary complications for patients and their family members.

The Prosthetic Assistance Service project was carried out in ASL Salerno, the local health unit of Salerno Province in the Campania Region, Italy. It aims to improve efficiency and sustainability in aid supply to Salerno citizens via integrative assistance within the local healthcare service to provide prostheses, orthoses and aids that are paid for by the SSN. Prostheses replace missing body parts (e.g. artificial limbs) to recover bodily functions. Orthoses (e.g. braces, shoes and orthotics) increase or improve the functionality of body parts. Finally, other aids (e.g. wheelchairs, mattresses, Anti-decubitus tools and orthopedic beds) help with daily activities; they include the products, tools, equipment and technological systems used by a disabled person to prevent, compensate for, alleviate or eliminate a disability.

Reconditioning is defined as the process of repairing and maintaining an object from an aesthetic or mechanical–functional perspective. Refurbished products cannot be sold as new, even if they are "like new" when the customer returns them in excellent condition. A refurbished sanitary good is meticulously analyzed in its operation. After the necessary maintenance and sanitization, it is put back on the market as reconditioned; in contrast, an unconditioned used item has not undergone any checks, repairs, maintenance, or cleaning. The warranty for reconditioned products is usually short-term and must be agreed on with the tenderer in the supply contract, which is usually for two years. Not all aids can be restored; some are obsolete or no longer useful. Reconditioning sometimes requires additional small components to be purchased given the cost-benefit ratio. The refurbished product is delivered to the user after information and instructions about its use are provided. This project issued a call for tender for the supply of technical aids and services for disabled people, including the execution of specific services: inspection, transport, delivery, installation, collection, sanitation, maintenance, reconditioning, management and implementation at a single company warehouse; implementation of information technology-driven procedures; and the training and empowerment of district employees in the use of IT aid for warehouse aid management.

Because of the demand for reductions in public healthcare spending, ASL Salerno promoted the social care project in other geographical districts to coordinate the organizational workflow, as shown in Figure 3.

3.3 Primary data analysis: interview ratio
The interviewees included 16 professionals from local health districts in the Salerno local health unit, who were involved in the project. Table 1 shows their roles in the organization and the project, including the differences between the application of soft TQM principles in daily work and the project's timeline.

All questions for each item are reported verbatim in Table A1. The responses were summarized and coded following Macrì and Tagliaventi (2000), who suggested placing them in conceptual clusters to enhance the understanding of the respondents. This can be applied when interviews are conducted in groups, and participants share the same knowledge of the project's dynamics.
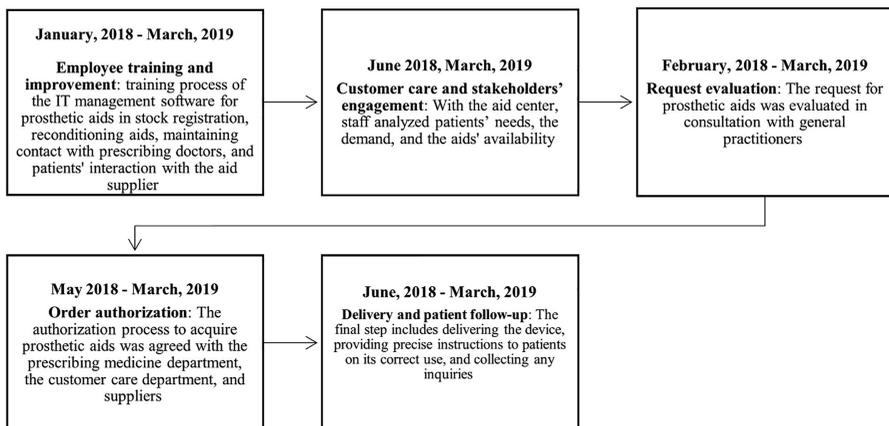

Figure 3.
Local health unit workflow

Source(s): Author's elaboration

Team member's code	Organizational role	Project role	Duration	Date of interview
Resp 1	Operative Unit Representative	Delivery planning	17′	July 31, 2019
Resp 2	Operative Unit Coordinator	Conformity assessment	6′	June 17, 2019
Resp 3	Professional nurse	Process owner	16′	September 3, 2019
Resp 4	Project Manager, RUP	Process owner	18′	September 3, 2019
Resp 5	O.U. Rehabilitation Coordinator	Director and coordinator	15′	July 31, 2019
Resp 6	Prescriber, Specialist	Medical prescription	7′	September 3, 2019
Resp 7	Social Worker	Head of prosthetic sector	14′	June 17, 2019
Resp 8	District Coordinator	Occupational therapy expert	9′	September 10, 2019
Resp 9	Coordinator Director	Team Coordinator	15′	July 31, 2019
Resp 10	Head of O.U.	O.U. Coordinator	12	July 31, 2019
Resp 11	Administrative assistant	Procurement assistant	16′	September 10, 2019
Resp 12	O.U. Rehabilitation Head	Director and Coordinator	15′	July 31, 2019
Resp 13	Chief nursing officer	Activities and monitoring	6′	June 17, 2019
Resp 14	Head of prosthetic rehabilitation	Promoter and project coordinator	25′	September 10, 2019
Resp 15	Head of Medical Operative Unit	Authorizing officer	10′	June 29, 2019
Resp 16	Medical Director of Rehabilitation Unit	Authorizing officer	8′	September 10, 2019

Table 1.
Respondents' profile

4. Findings

The findings were both empirical and conceptual. The former provided a comprehensive overview of the project's results to contextualize it as "best practice" in applying soft TQM CSFs, specifically in health and social care. The latter contributes to the debate in the soft TQM literature by providing a framework that enables the identification of success factors in multiservice social care organizations.

4.1 Empirical findings

Practical findings were derived by leveraging contextual data (Abramson and Dohan, 2015) provided by ASL Salerno, as well as in interviews where the participants freely described their insights gained by their participation in the project.

Tables A2 and A3 summarize the statistics on prosthetic aids delivered between 2018 and 2019, respectively, among various geographical districts in Salerno. Overall, the percentage of recycled aids declined over the two years, which was satisfactory, considering that this project represents the first successful experiment on healthcare sustainability (Rizan *et al.*, 2021) conducted by a local social care organization. Furthermore, the fact that the aid project has developed and been maintained over two years with homogeneous results bodes well for the future, increasing challenges to environmental and economic sustainability.

The secondary unstructured data comprised the participants' final detailed insights. The first seven months of service implementation showed that 3,502 users received aids, or a total of 4,768 delivered aids (monthly average of 666 aids), of which 16% were not delivered due to death, poor compliance, or patient hospitalization. There were 3,917 aids delivered (monthly company average 560), of which 57% were new aids and 43% were reconditioned. The recycling index for each aid was equal to a value between 80 and 100% for air mattresses, walkers, and lifters and between 65 and 100% for wheelchairs. By focusing on specific

districts, the data collected from District 60 of ASL Salerno showed that from 01 July 2018 to 15 March 2019, 293 refurbished aids were delivered. The comparison between the costs derived from aid management procedures in the warehouse (i.e. reconditioning) and the expected costs of the purchase of new aids amounted to €33,896.15 instead of €145,165.55.

The findings showed an expected savings of €203,066.65 per year in the Salerno health district and €2,639,866 per year in all 13 health districts of ASL Salerno, where the assisted population comprises 1,106,506 inhabitants. In the 13 districts, the number of reconditioned annual aids expected per year was 6,530. Of a total annual expenditure of €20 million for prosthetic assistance, ASL Salerno experienced a 13% reduction, which is a highly positive trend considering the implications for environmental sustainability. This finding suggests that the goal of savings due to prosthetic regeneration is in line with the goals of social care organizations that aim to implement TQM to meet the expectations of the external environment (i.e. cost savings, customers' needs, and stakeholders' interests) (Zhang *et al.*, 2021).

4.2 Qualitative research findings

The interviews were conducted to investigate the effectiveness of each CSF. Many responses were similar; therefore, they were merged and summarized. It was possible to extract recurrent themes on soft TQM (Table A1) through a narrative analysis (Rogan and de Kock, 2005). These themes were categorized into five groups and defined to facilitate their exploration, as described below.

> *Theme 1.* **Resource integration.** The participants described themselves as resource integrators in the organization because they came from different professional backgrounds (Table 1). Given its multiservice nature, this project was managed by members of the local health unit belonging to different sectors (medicine, administration, nursing, accounting); participants were involved in each function and acted as resource integrators:

Interviewees 13–9: Our involvement was all-encompassing, more so in this project than in our daily activities since local health districts require the sharing of information, contexts, procedures, and the state-of-the-art of the various operations. We were called to act as referrals and support other tasks since the project needed to be redesigned and improved. Team members acted as resource integrators, addressing instances from the external environment (e.g. patient requests, queries concerning the timing of withdrawal/distribution of aids) that otherwise would have been challenging to detect.

Experience, skills, perspectives, and relationships with stakeholders are pivotal in fostering quality and innovation because they allow both the team and the organization to manage services differently from the original design by the local health unit. Therefore, the first factor (CSF1) in Figure 2 was confirmed.

> *Theme 2.* **Democratic participation and leadership.** Through meetings, debriefings, round tables, and Skype calls, the communication during the project involved democratic coordination. Democratic leadership is the core that ruled teamwork activities, supporting informal and familiar language, openness to proposals, and participatory re-discussions of the various steps.

Interviewees 2–7: We shared all information and activities with a simple and informal language structure. Even when investing much more time than we usually spend in our common working lives, we felt that each of us participated in every meeting for updates and improvements. Initially,

we met daily for the first month using Skype or Google Meet, after which organizational updates were still daily, but carried out in a WhatsApp group for internal coordination. Of course, regular in-person meetings were scheduled one to two times per week, with some exceptions.

The participants struggled to identify an effective team leader because of the absence of middle managers who coordinated and reported the implementation steps. The team structure was not hierarchical but horizontal and democratic; managers in medicine and administration departments were considered such only from a bureaucratic perspective:

Interviewees 1–5: Our team is composed of highly qualified professionals and colleagues who often and willingly deal with their daily tasks. We work in various local districts, and therefore, each of us has autonomy. Honestly, we struggle to identify a specific leader or a well-defined and rigid hierarchical structure. Beyond relational and diplomatic roles, we do not feel like expressing who coordinated what.

Sharing each decision among all members resulted in a large investment of time in their common work activities. This was a price the team was willing to pay to preserve organizational culture and participation. Therefore, CSF10 failed to find support, while CSF11 was reinforced:

Interviewees 3–4: The whole project's steps were implemented, checked, and approved by each of us. This certainly resulted in longer delivery times for the tasks; nevertheless, it has been largely recovered by the punctuality of the aid reconditioning process.

Theme 3. **Continuous improvement and training.** A human resources focus is central in soft TQM because it evaluates the extent to which employees undergo training, empowerment, and skill improvement processes to enable them to better deal with complex tasks.

Interviewees 13–9: From an organizational perspective, belonging to different local health districts has allowed each member to perform better as a team and to provide punctual logistical-managerial adjustments.

The ongoing training that employees received was based on IT software empowerment (i.e. aid storage) and the quality control of their reconditioning process. Each member became an educator of other organizational members in a virtuous knowledge integrator cycle, which was related to project implementation rather than daily work. Accordingly, Continuous Training and Empowerment (CSF4 and CSF6) are not considered permanent functions to be measured in time but a medium-term process to be implemented:

Interviewees 8–11: Operationally speaking, the first empowerment stage of using project management tools and software to store and deliver aids has been implemented.

In contrast, CI (CSF2) continued throughout the project because of the dynamic needs emerging from the ecosystem, including suppliers' requests, patients' needs, new procedures to be implemented, and deadlines to be met.

Interviewee 15: This project required ongoing training on both economic and health sustainability and the reconditioning of prosthetic aids, as none of us were specifically trained. but has affected the entire project, given the complex nature of our multiservice orientation.

Theme 4. **Stakeholders' relationships.** Regarding external factors, relationships with the organization's stakeholders are pivotal in terms of customer satisfaction (CSF7 and CSF8) and supplier management (CSF9):

(1) Customers were completely involved through different initiatives (i.e. surveys, follow-ups, and interviews) to assess service satisfaction and emergent problems; in addition, customers gave feedback on unsuitable or delayed aids:

Interviewees 10–12: Talking to patients has been the key: They have been receptive to the need to save public spending, and have released precious feedback, thanks to which we have improved our various steps. Considering the available time, we preferred a semi-structured survey to analyze both performance and quality indicators and to gain useful hints to improve our processes. The most critical feedback related to prosthetic aid delivery time; positive feedback, instead, is related to service assistance and information about correct use.

(2) Suppliers faced challenges in receiving refurbished aids from the factory and in their poor capacity to use software for sorting orders.

Interviewees 14–16: The project has certainly achieved great success. Nevertheless, it needs improvements, certainly, from the point of view of suppliers' relationships, particularly with aid delivery because it required more time than expected and planned in both processing and then delivering aids to customers. These aspects negatively affected some patients' perceptions concerning the quality of the service offered. Therefore, we will implement an analysis of both internal and external procedures to figure out where the gap was and fix it for the next time.

These relationships were mutual because one influenced the other; delays due to aid management by suppliers partially affected users' opinions concerning the service (as shown by customer satisfaction surveys). Moreover, supplier relationship management dramatically affected not only service effectiveness but also users' views of the organization.

Theme 5. **Changes in organizational culture.** Changes in organizational culture were found to be key determinants in the management of the project. Participants' sensitivity in adapting to changes in working methodologies and teamwork (CSF5) and attending to the environment and its emerging needs (CSF12) were vital to ensure team success:

Interviewees 14–16 - We are required to offer more and different services from those originally conceived by the organization as such. We changed the way we work, we verticalized on a specific topic, and we learned new IT project management skills. If each of us were not adaptive or sensitive to the organization's culture of change, the project would not have achieved this success.

However, because the participants differed in their professional profiles, all were not fully aware of the entire SQP (CSF3) procedure:

Interviewees 1-5-9-13: Honestly, not all members share the same professional background. Certainly, those who have already exercised the role of the project manager or unit coordinator are familiar with all the steps of strategic quality management, and although some practices have been unconsciously adopted (patients' needs and targeting analysis, gap analysis, and implementation), we struggle to answer the question appropriately.

Only participants who were familiar with project management activities knew about a few practices that had nevertheless been unconsciously adopted (i.e. patient's needs, targeting analysis, gap analysis, and implementation).

5. Discussion
The main takeaways of this article were divided twofold. Bryman's (2008) protocol for qualitative research in organizational studies is divided into theoretical and practical aspects.

The former has contributed to the literature on social care TQM soft factors in findings emerging from the participants' responses. The latter is a configuration of the social care multiservice ecosystem as an ideal environmental context for the proliferation of these factors. At the end of this section, the final considerations of the results of this study are provided.

5.1 Theoretical contributions: social care organizations through the lens of soft TQM
The findings allowed us to determine several key factors that contribute to the current debate in TQM studies. These factors were labeled conceptual dimensions to be considered in a future quantitative evaluation of the effectiveness of soft TQM in social care organizations.

Total employee involvement. The findings of this research showed that employee involvement in different aspects (i.e. training, interaction, empowerment, and adaptation) positively affected implementation processes, spurring CI and a factual approach to decision-making (Bakotić and Rogošić, 2017). As in the case of social care organizations, total employee involvement is considered a core dimension (Ghenṭa *et al.*, 2014) to meet the increasing demands of users. Various needs and objectives in the external environment require the total involvement of professionals (Olsson and Gustafsson, 2020) at both team and organizational levels. To reach Employees 'involvement, managers need to promote a new organizational culture and a proactive approach to employees. Employees should be provided with the necessary independence, information, and skills (Woolham *et al.*, 2019), which was confirmed by the multiservice ASL social care project.

Customer satisfaction. The literature is consistent regarding the need to sustain relationships with consumers—patients—which is a core CSF in assessing organizational performance in specific projects (Vogus and McClelland, 2016). The findings of this study showed that the participants were fully aware of the need to implement systems (i.e. surveys and interviews) for evaluating patient satisfaction. TQM strategies are based on the logic of service user evaluation to receive feedback on both state-of-the-art projects and organizational dynamics.

Social care ecosystems are based on customer involvement to provide the best services (Ocloo *et al.*, 2021) and evaluate their impact on opinions (Kallio *et al.*, 2022; Kohout *et al.*, 2022). These represent the core characteristics of social care organizations that are increasingly inclusive in their dialogs with patients.

Democratic management and teamwork. The results of the present case study are in line with recent research (Smith *et al.*, 2018; Akoglu and Dankl, 2021) that promotes a democratic managerial approach and a horizontal decision-making structure. Managers are formally chosen, but they do not perform this role in practice. Because of the need to reduce public spending, the same professionals within the organization are often employed for specific projects, and they are often asked to adapt to tasks that usually do not involve them. Accordingly, the findings revealed that the project had a strong predisposition to teamwork in considering the needs for new services in the environment. In contrast, it has rejected the idea of a structured leadership role, thus paving the way for further studies on non-leadership or co-leadership (Klinga, 2021) in the "soft" TQM domain of social care.

CI and training. The findings showed that CI was a long-term process, unlike training, which was concentrated in the early stages of the project. In social care, CI focuses on the workforce's attitude toward being empowered and motivated to seek continuous improvements in the quality and efficiency of the care they deliver (Maguire *et al.*, 2018). According to new trends in the literature (Martin and Manley, 2018), these improvements particularly concern digital empowerment processes. In the project, training in e-health was provided to achieve continuous improvement, which may represent new frontiers in social

care organizations (Lolich *et al.*, 2019) and in enhancing employees' digital literacy regarding health (Palumbo *et al.*, 2021).

Supplier management: Relationships with suppliers have been discussed in the soft TQM literature, which has often questioned the necessity of implementing a specific system to control processes and relational exchanges to ensure the success of a project (Pellegrino *et al.*, 2020; Sriyakul *et al.*, 2019). Eventually, if it is impossible to adopt these protocols within social care organizations, specific human resources could be allocated to perform such tasks. It is likely that such protocols were lacking in the project, which led to time delays that affected the patients' opinions about the organization. This risk is common in social care organizations, which are called upon daily to be adaptive and resilient to avoid service disruptions rather than provide them (Wong *et al.*, 2021).

This study showed which success factors and dimensions could impact on soft TQM in social care organizations, contributing to some extent to filling an existing gap. The RQ, which was aimed at depicting the soft TQM constructs that could be used to enhance quality in social care ecosystems, should be considered satisfactorily answered despite the limitations of the study. Table 2 displays the CSFs and constructs that emerged from the analysis. An interesting finding concerned the absence of a structured form of leadership, which may lead to further investigation to understand this approach to team management in social care projects. Furthermore, the study emphasized the role of the environment; therefore, suppliers' management will be investigated in future research by the authors.

5.2 Practical contribution: social care organizations as multiservice ecosystems
The findings of this study suggest that social care organizations can be conceived of as multiservice ecosystems (Perlman and Dobbin, 1984; Riedl *et al.*, 2009; Sunshine *et al.*, 1991, 1992). A multiservice ecosystem is characterized by strong interdependencies and relationships between different stakeholders: patients, doctors, hospital staff, and suppliers as well as public and private research bodies, ministries, and local and national institutions. They implement valuable co-production processes in public health services (Fledderus *et al.*, 2014) according to environmental needs.

Service improvement should always be the prime motivator of organizations to enhance the sustainability and living conditions of human beings (Morea *et al.*, 2021), even in reconsidering all possible variables of services, even if they are not core activities. Therefore, organizations are involved at four different levels:

(1) Micro-level Action-2-Action interactions (organization's employees and customers; Hardyman *et al.*, 2015)

CSF emerged	CSF discarded	CSF to be contextualized	Categories emerged
CSF 1	CSF 3	CSF 4	Total Employee involvement [CSF1; CSF12]
CSF 2	CSF 8	CSF 6	Customer Satisfaction [CSF7]
CSF 5		CSF 10	Democratic Management and Teamwork [CSF5; CSF11]
CSF 7			Continuous Improvement and Training [CSF2]
CSF 9			Supplier Management [CSF9]
CSF11			
CSF 12			

Table 2.
Critical success factors results

(2) Meso-level interactions between organizations (Barasa *et al.*, 2015), such as the Central Health Unit and different local health units

(3) Macro-level (Findikoglu and Watson-Manheim, 2016); that is, exchange and supply of hospital services

(4) Mega-level with participation in common projects of local, regional, and national public and private bodies (Manna *et al.*, 2018).

Social care service ecosystems include the coordination of organizations, professional groups, managers, suppliers, and operative staff to meet environmental needs. The reason is that social care organizations have increasingly demanded high efficiency in cost-saving scenarios. However, simultaneously, the services required by the community are at the risk of a focus on cost-effectiveness rather than on patients, which Saviano *et al.* (2010, p. 42) described as *the "relational approach centered on human values and needs with the result that client evaluation of effectiveness is undermined."* By embracing the notion that organizations depend on relationships between customers, employees, and the environment (Vicari, 1991), a new conceptualization of this relationship emerges (Figure 4).

The proposed model enrich the TQM view by drawing from the service ecosystem logic. On the one hand, the external environment push (driven by a cost saving and efficiency logic), and those of the patient (safety, care and reduced time) on the other, lead the social care organization to rethink the services' offer, no longer enough to intercept the expectations of the two prime movers. Therefore, through Stakeholder and Supplier Management initiatives, it transfers the medium/long-term needs from the macro and mega level of health systems to the core organization, while keeping its focus on patients' urgencies through continuous dialog (Customer Satisfaction measures). The organization, once intercepted the demands, generates new organizational projects/services to be conducted through four key assets: continuous improvement and training, teamwork, total involvement of all members in the project (with a fair and democratic division of roles by project), and democratic project management, characterized by an absence of formal and vertical leadership.

This framework presents an organization that responds to the current demand of healthcare service and efficiency (Schirpke *et al.*, 2019) from the external environment. Therefore, it provides managers with specific recommendations and action plans for improving soft TQM practices according to the sustainable and long-term vision of social care multiservice ecosystems. Consistent with the social care literature, CSFs are emergent in both service ecosystems and social care organizations. They are prime movers in the effective

Figure 4.
Multiservice social care
organization model

Source(s): Authors' elaboration

implementation of TQM practices. Accordingly, the multiservice ecosystem model of social care appears coherent with the aims and findings of this study and, it may nourish the TQM literature on the application of soft levers in service organizations such as health and social care.

6. Conclusion, limitations and research recommendations

This study aimed to contribute to the debate in the TQM literature. It represents a current effort to understand which soft quality management factors could be required and implemented in a social care multiservice ecosystem. As observed, not all CSFs identified in the literature are applicable to social care organizations that conduct projects in compliance with environmental needs. Therefore, the findings of the present study provide a foundation for further empirical investigations of the effectiveness of "soft" TQM factors that impact local health units and social care projects.

This study has several limitations. Because of the exploratory nature of the interviews, the responses of the managers were not quantitatively relevant to addressing the RQ. Moreover, the review of the soft TQM literature was conducted systematically; therefore, it did not include the full range of scholarly efforts to contextualize this asset. The items chosen to set up the interviews were based on the soft TQM literature, still following discretionary and non-systematic criteria. Finally, despite the encouraging results of the interview data, they were quantitatively insufficient to determine that soft TQM is one of the most effective organizational tools for evaluating performances in social care organizations, and they should be addressed in future research at both national and international social care level.

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Appendix

Questions

Q1 How were participants involved in the steps of the project? Are they satisfied with their level of involvement?

Q2 How much did the project need to be redesigned and improved during construction? How much has it changed, and what has spurred on this process?

Q3 Have you implemented a strategic quality management plan?

Q4 Did you participate in a training program specific to project task management? If so, did it cover the entire project or only its beginning?

Q5 How did members coordinate? What working methodologies have you adopted (face-to-face, computer-mediated, mixed)?

Q6 How do you feel the project has improved over time?

Q7 Have customer satisfaction surveys been submitted to patients? If so, which tools (interviews, questionnaires, focus groups) have you adopted?

Q8 Have specific professionals been provided for the process analysis task?

Q9 What is your opinion on suppliers' relationship management?

Q10 Have you identified top and middle managers on your team? What kind of support did they provide?

Q11 Could you define your project as having a democratic management style?

Q12 Recent discussions in the literature argue that organizational culture change originates from the emerging context (environment) dynamics. Does this concept find confirmation in healthcare organizations?

Source(s): Author's own creation

Table A1.
Open questions employed

District	Number of delivered aids			% Recycled	% New
	Used	New	Total		
District 60: Nocera Inferiore	142	18	160	89%	11%
District 61: Angri	73	202	275	27%	73%
District 62: Sarno/Pagani	71	35	106	67%	33%
District 63: Cava/Costa	165	232	397	42%	58%
District 64: Eboli	163	201	364	45%	55%
District 65: Battipaglia	37	0	37	100%	0%
District 66: Giffoni V. Piana	128	122	250	51%	49%
District 67: Salerno	67	28	95	71%	29%
District 68: M.S. Severino	22	110	132	17%	83%
District 69: Capaccio/Rocca	103	96	199	52%	48%
District 70: Vallo/Agropoli	71	123	194	37%	63%
District 71: Sapri	32	40	72	44%	56%
District 72: Sala Consilina	48	109	157	31%	69%
ASL SALERNO	1,122	1,316	2,438	46%	54%

Source(s): Author's own creation

Table A2.
Campania Region — ASL Salerno — Delivered aids from 07/01/2018 to 12/31/2018

District	Municipalities	Number of delivered aids			% Recycled	% New
		Used	New	Total		
District 60: Nocera Inferiore	4	67	133	200	34%	66%
District 61: Angri	4	56	164	220	25%	75%
District 62: Sarno/Pagani	4	20	67	87	23%	77%
District 63: Cava/Costa	14	82	135	217	38%	62%
District 64: Eboli	8	196	115	311	63%	37%
District 65: Battipaglia	3	9	43	52	17%	83%
District 66: Giffoni V. Piana	9	178	219	397	45%	55%
District 67: Salerno	2	61	38	99	62%	38%
District 68: M.S. Severino	6	43	164	207	21%	79%
District 69: Capaccio/Rocca	21	95	60	155	61%	39%
District 70: Vallo/Agropoli	37	74	170	244	30%	70%
District 71: Sapri	17	1	39	40	2%	98%
District 72: Sala Consilina	19	48	53	101	48%	52%
ASL SALERNO	148	930	1,400	2,330	40%	60%

Source(s): Author's own creation

Table A3.
Campania Region —
ASL Salerno —
Delivered aids from 01/
01/2019 to 03/31/2019

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