

Unravelling quality culture in higher education: a realist review

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Abstract There is a growing belief that higher education institutions should nurture a 'quality culture' in which structural/managerial and cultural/psychological elements act in synergy to continuously improve education. Notwithstanding the positive connotation of the 'quality culture' concept, its exact configuration remains subject to debate. A realist review was conducted to identify inhibiting and promoting organisational context elements impacting quality culture, its working mechanisms and associated outcomes. Leadership and communication were identified as being of key importance in binding structural/managerial and cultural/psychological elements. Leaders are central 'drivers' of quality culture development through their ability to influence resource allocation, clarify roles and responsibilities, create partnerships and optimise people and process management. Adequate communication is considered a prerequisite to diffuse quality strategies and policies, evaluate results and identify staff values and beliefs. It is proposed that the working mechanisms of quality culture comprise increased staff commitment, shared ownership, empowerment and knowledge. Associated outcomes related to these mechanisms are positive effects on staff and student satisfaction, continuous improvement of the teaching-learning process and student and teacher learning and development. Institutions

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striving for the development of a quality culture should best operate from a contingency approach, i.e. make use of quality management intervention approaches which are tailored to the organisational context.

Keywords Quality management · Quality culture · Educational improvement · Higher education · Realist review

Introduction

Whereas higher education institutions (HEI) nowadays find themselves confronted with a decrease in public funding, they simultaneously need to invest in organisational change processes in order to be able to gain position in an increasingly competitive market. In the past two decades, the intensified concern for the development of quality management in the field of higher education has been amplified by an increased public and political demand for 'accountability' as well as the strategic use of information on quality indicators for marketing purposes (Boyle and Bowden 1997; Sutic and Jurcevic 2012). Systematic and comprehensive quality management approaches have been widely adopted by HEI and now form an integral part of institutions' attempts to become more efficient, effective and client oriented (Sahney et al. 2010).

The formalisation and standardisation of quality management practices have contributed to expansion of quality monitoring and the potential to identify measures for improvement. However, it remains unclear whether these practices in themselves have contributed to the actual improvement of teaching and learning (Harvey and Williams 2010). For one reason, it can be questioned whether standard approaches to quality management are appropriate for institutions which often vary substantially in terms of their mission, objectives, size and nature of student intake (Lomas 1999). Moreover, increased attention to quality management yields opportunity costs and can meet reluctance of academics who feel these procedures are externally constructed, managed and imposed (Lomas 2004; Newton 2000). Tools and instruments for quality management might not work as intended—or even have a negative impact on organisational processes—due to their implementation from a top-down direction, neglect of individual staff members' autonomy and viewing of staff as passive receivers of policy instead of active contributors (Davies et al. 2007; Harvey and Stensaker 2008; EUA 2012).

Reported bottlenecks in HEI relating to the implementation of quality management are in line with findings of research conducted in a variety of disciplinary settings; in order to be successful, strategies, processes and tools for quality management should act in congruence with the present organisational culture (Irani et al. 2004; Maull et al. 2001; Powell 1995; Prajogo and McDermott 2005). Higher education organisational culture has been defined as 'the collective, mutually shaping pattern of norms, values, practices, beliefs and assumptions that guide the behaviour of individuals and groups in an institute for higher education and provide a frame of reference within which to interpret the meaning of events and actions on and off campus' (Kuh and Whitt 1988, p. 28). The term 'quality culture' has been introduced more recently, to utter the idea that the culture of an organisation and educational quality should not be seen as independent entities, but rather that 'quality stems from a broader cultural perspective' (Harvey and Stensaker 2008, p. 431). The



importance attributed to quality culture is rooted in its political applicability: it reflects a desired shift from quality control, emphasis on accountability and regulation, to increased autonomy, credibility and educational enhancement based on the experiences, expertise and values of HEI (EUA 2006). The European University Association (EUA) has formulated a definition of quality culture which can be considered an important landmark in attempts to further operationalise the concept. Quality culture according to the EUA is:

an organisational culture that intends to enhance quality permanently and is characterised by two distinct elements: on the one hand, a cultural/psychological element of shared values, beliefs, expectations and commitment towards quality and on the other hand, a structural/managerial element with defined processes that enhance quality and aim at coordinating individual efforts (EUA 2006, p. 10).

Quality culture can thus be regarded as a specific kind of organisational culture which encompasses shared values and commitment to quality. The definition holds that, in addition to 'hard' aspects (e.g. quality management, strategies and processes), 'soft' aspects (e.g. values, beliefs and commitment) influence quality culture. Moreover, a quality culture implies a collective responsibility: it is considered to coincide with management commitment to quality as well as a grass-roots involvement of academic and administrative staff and students. In order for a quality culture to develop, an appropriate balance between top-down and bottom-up approaches to enhance quality and coordinate individual efforts is required (EUA 2006). In Fig. 1, the EUA definition of quality culture is depicted. The figure illustrates that the organisational structural/managerial and organisational cultural/psychological elements of quality culture are not to be considered separately: they must be linked through elements such as communication, participation and trust.

Although the positive connotation of quality culture implies that it is worth striving for, the exact meaning of the concept is also subject to debate. It has been noted for instance that it is too straightforward to speak about 'the quality culture' as such, since it constitutes a complex social-constructivist phenomenon of which the contours are shaped by the organisational context, values (Berings and Grieten 2012; Harvey and Stensaker 2008) and the development phase of dealing with quality management in which the organisation resides (Bollaert 2014). The quality culture of an organisation is difficult to assess because it involves the taken-for-granted, shared assumptions of individuals in the organisation, which lie beneath the conscious level (Cameron and Freeman 1991). This forms an



Fig. 1 Elements of a quality culture (Adapted from EUA 2010, p. 17)





explanation for the so far existing paucity of research on the emergence of quality culture and the grounding of its merit (Ehlers 2009).

A realist review, which encompasses a combination of in-depth analysis of previously conducted empirical research with the formulation of propositions contributing to further theory development on quality culture, was conducted with the aims to:

- Identify hampering and promoting organisational context elements impacting quality culture development;
- 2. Explore the most important 'working mechanisms' of quality culture;
- 3. Provide insights in the outcomes associated with quality culture.

In line with its focus on quality management and the development of quality culture within HEI, this study is directed to analysis of the internal context of organisations; it is targeted on the conditions, entities, events and factors within HEI that influence its activities and choices, particularly the behaviour of staff. Quality culture is envisaged throughout the paper as the conglomerate of its promoting organisational context elements, key working mechanisms and associated outcomes.

Methods

Realist review

A realist review is a systematic and theory-driven approach aimed at searching and refining explanations of the relationship between contextual elements, mechanisms and outcome(s) of interventions (Pawson et al. 2005). Realism holds that mechanisms matter because they generate outcomes and that contextual elements should be taken into account since they influence the processes by which an intervention produces outcomes (Wong et al. 2013a). The term 'mechanism' refers to the reasoning or reaction of participants and stakeholders to an intervention. According to realists, it is not the intervention itself that produces outcomes. Rather, the intervention impacts on working mechanisms through addressing resources, opportunities and constraints which then lead to the decisions, choices and behaviour of stakeholders. Mechanisms are not directly observable, but can be identified by reconstructing the reasoning of stakeholders (Wong et al. 2013b). The realist methodology allows for an interpretative, reflexive and iterative review process (Pawson and Manzano-Santaella 2012).

As empirical research on quality culture is scarce, the conducted review included studies on quality management within HEI, i.e. 'the institutional arrangements for assuring, supporting, developing and enhancing, and monitoring the quality of teaching and learning' (Council on Higher Education 2004, p. 28). Hence, quality management is seen as the intervention of concern. Quality management interventions are to be embedded in—and are influenced by—the organisational context and trigger mechanisms which lead to quality related outcomes. The study focuses on refining the understanding of quality culture by investigating differences between situations with effective and ineffective implementation of quality management. The organisational context elements, working mechanisms and realised outcomes, are considered attributes of the quality culture which provide explanations for differences in effectiveness of quality management interventions.

Systematic search strategy

In June 2014, a systematic literature search was performed to identify studies relating to the concepts of quality management and quality culture development in higher education. The search included seven databases, covering various disciplinary fields: Business Source Premier (BSP), Econlit, Education Resources Information Center (ERIC), Medline, Psycinfo, SocIndex and Web of Science. Databases were searched by using a combination of the key search terms 'quality culture', 'quality management', 'higher education' and 'improvement'. Synonyms and/or related concepts to the key search terms were used to gain an overview of relevant studies. A total number of 63 terms were applied in the search (the search terms are listed in Appendix 1).

In- and exclusion criteria and review process

The initial search was limited to English peer-reviewed articles, published in academic journals between 1980 and June 2014. To be included, articles needed to adhere to various inclusion criteria. They had to concern (1) higher education, (2) internal quality management and (3) elements influencing quality management practices or educational enhancement (as opposed to studies merely assessing (service) quality). Moreover, articles had to (4) incorporate in-class education and (5) include a presentation of empirical data. Please refer to Appendix 2 for a detailed overview of inclusion and exclusion criteria). No further constraints for article selection were applied on methodological grounds. Titles and/ or abstracts of articles where initially reviewed by the first author. Whenever there were doubts as to whether or not articles fully met the inclusion criteria, their abstracts were independently reviewed and discussed by all authors and, if necessary, full texts were assessed. An overview of the articles was generated by summarising study objectives, study design, data collection instruments, setting/study population, main results, conclusion and information on quality culture elements. Thereafter, information from individual articles was extracted to construct a table which describes the context-mechanism-outcome configuration.

Iterative search

As the review process progressed, data suitability limitations occurred. The search strategy and application of in-and exclusion criteria led to an overrepresentation of studies involving implementation of total quality management (TQM) approaches in HEI. The applicability of TQM approaches in education has been questioned as they have a tendency towards structuralism/managerialism and focus on processes (Harvey and Williams 2010). It was deemed necessary therefore, in line with the realist review approach (Wong et al. 2013a), to iteratively search for articles with a more specific focus on cultural/psychological elements. The iterative search was conducted through 'snowballing' (cross-reference check of the articles with a main focus on culture, along with an author-based search). All articles identified in the iterative search fully met the before mentioned inclusion criteria.

¹ Both the overview of general study characteristics and the Context-Mechanism-Outcome configuration table are available from the first author upon request.





Results

Search results

The results of the systematic search and review process are presented in Fig. 2. The initial search yielded 1622 articles. Removal of non-English articles and duplicates led to a number of 1245 articles eligible for review. The five inclusion/exclusion criteria were addressed in three subsequent review rounds (1st: title/abstract review by first author, 2nd: title/abstract review by all authors, 3rd: full text review by first author) and resulted in 25 articles eligible for inclusion. An iterative search conducted by the first author resulted in an additional 6 articles to be included, leading to the final inclusion of 31 articles.

Organisational context: promoting and inhibiting elements shaping quality culture

Promoting and inhibiting elements shaping quality culture which are related to the organisational context were derived by exploring patterns in studies performed on implementation of quality management and quality culture development in HEI. The

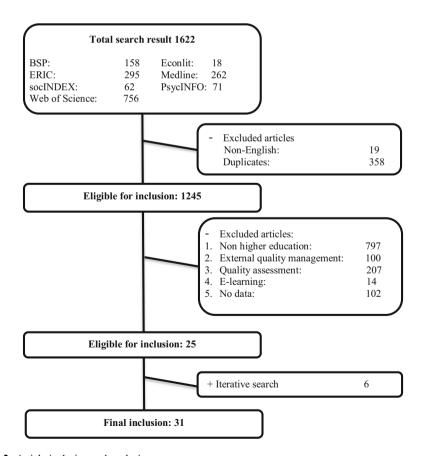


Fig. 2 Article inclusion and exclusion



Table 1 Promoting and inhibiting organisational context factors impacting quality culture

Promoting elements	Inhibiting elements
Organisational structure/managerial elements	
Strategy of continuous improvement Quality management systems Staff and student involvement in organisational decision making Taking into account evolving student demands Clear policies, procedures, systems responsibilities	Hierarchical structure/structural division Lack of staff and student involvement in organisational decision making Neglect of evolving student demands Lack of policies, procedures, systems, responsibilities Lack of resources Top-down (managerial) approaches to quality management implementation Research focus
Organisational subculture/psychological element	's
Flexible, people-oriented cultures Presence of various cultures Shared (educational) quality values	Rigid, control-oriented cultures Presence of strong disciplinary cultures Research culture/undervaluing education
Leadership elements	
Leadership commitment and skills Allocate resources Create partnerships, influence people management Create climate of trust and shared understanding Ability to perform multiple roles Setting and communicating policies	Lack of leadership commitment and skills Focus on inspection and control Acting as communication gatekeepers
Communication elements	
Communication/information for quality Provide information on strategies and policies Clear tasks requirements and responsibilities	Lacking communication/information for quality Lack of sharing best practices across the organisation Lack of appropriate communication channels

'structural/managerial' dimension and a 'cultural/psychological' dimension as formulated in the EUA definition of quality culture served to frame the promoting and inhibiting elements. 'Leadership' and 'communication' elements are considered to have both 'structural/managerial' and 'cultural/psychological' attributes and act as binding elements between the two. A summary of promoting and inhibiting elements relating to the organisational context is presented in Table 1 (a summary including literature references is included as Appendix 3).

Structural and managerial elements of a quality culture

In order to provide quality culture a permanent place high on organisational agendas, its development is ideally a main focal point of the institutional mission (Kanji and Tambi 1999; Osseo-Asare and Pieris 2007; Sahney et al. 2010). Taking into account and acting upon evolving demands of students, form part of structural attempts to create a culture of continuous educational improvement (Ardi et al. 2012; Doval and Bondrea 2011; Kinzie and Kuh 2004; Sulaiman et al. 2013). Moreover, involvement of students through participation in education and institutional decision making is deemed important for quality





culture development. It should be noted though that, while involvement of a small part of the student population is safeguarded through representation in advising or decision-making bodies, increasing involvement of the mass of students remains a challenge (Doval and Bondrea 2011). The active involvement of HEI staff in decision-making and setting of educational policies, procedures and responsibilities has been shown to help overcome staff reluctance stemming from top-down approaches to quality management (Haapakorpi 2011; Horine and Hailey 1995; Newton 2002; Spencer-Matthews 2001; Sutic and Jurcevic 2012) and nurture quality culture through grass-roots involvement. A basic requirement for quality culture development is for HEI to have the evaluation systems in place to provide information on (evolving) student demands and identify opportunities for enhancement (Burli et al. 2012; Kanji and Tambi 1999; Sutic and Jurcevic 2012).

Various inhibiting structural/managerial elements of quality culture comprise the counterparts of the promoting elements described above, e.g. lack of staff and student involvement (Spencer-Matthews 2001), lack of clear policies, procedures (Osseo-Asare et al. 2005; Sutic and Jurcevic 2012) and responsibilities (Valiuskeviciute and Ziogeviciute 2006). Inhibiting elements can be inherent to the typical hierarchical structure of HEI. Centrally determined quality management policies and procedures might overlook that requirements and responsibilities of specific roles are either not clear to, or assumed by, staff (Flumerfelt and Banachowski 2011; Sutic and Jurcevic 2012; Valiuskeviciute and Ziogeviciute 2006). Another premise on the 'structural/managerial side' of the organisational context spectrum is availability of resources. Allocation of scarce means to quality culture development requires a strategic prioritisation of education. Various studies report that staff experience high workloads and lack time to spend on responsibilities in quality management and quality culture development (Haapakorpi 2011; Horine and Hailey 1995; Kanji and Tambi 1999; Osseo-Asare et al. 2005). The issue of resource availability relates to the existing dichotomy between demands on staff to, on the one hand, excel by attaining the highest possible research assessment scores and, on the other hand, demands to enhance the quality of educational programmes and teachings skills (Lomas 2004; Osseo-Asare et al. 2005; Skelton 2012). Finding the right balance between teaching and research has been found to be a major challenge for HEI staff (Osseo-Asare and Pieris 2007).

The impact of organisational subcultures and psychological elements on quality culture development

HEI possess several organisational culture types (Cameron and Freeman 1991). These 'subcultures' within the organisation emerge as a consequence of staff being active in a variety of disciplines and departments. Quality culture coincides and overlaps with other organisational subcultures. An important implication of research on the relationship between culture types and various HEI effectiveness criteria (i.e. student satisfaction, staff satisfaction, ability to acquire resources) is that culture types have a diverse influence on effectiveness criteria. Explanations for the existing differences in organisational subcultures' effectiveness lie in the attributed reasons for 'bonding' and the 'strategic emphases' of each culture type. The typical 'hierarchy' subculture type is characterised by bonding based on rules, policies, procedures, clear expectations and assignments and a strategic emphasis on stability, predictability and smooth operations. This contrasts with 'adhocracies', which emphasise bonding through a shared commitment to entrepreneurship, flexibility and risk and a strategic emphasis on innovation, growing and acquiring new resources. 'Market' subculture types are characterised by bonding through goal orientation, production and strategic emphasis on competition and market superiority. The 'clan'



subculture type resembles loyalty, tradition and interpersonal cohesion and strategies directed to human resource development and maintaining commitment and morale (Cameron and Freeman 1991). In general, flexible, people-oriented cultures ('clan' and 'adhocracy') have been found to be related to most effectiveness criteria, followed by competitive, goal-oriented ('market') cultures and more rigid, control-oriented ('hierarchy') subcultures (Cameron and Freeman 1991; Horine and Hailey 1995; Smart and St. John 1996; Trivellas and Dargenidou 2009).

Subcultures potentially encompass alternative value orientations towards educational quality and influence the way quality management is perceived and effectuated (Kleijnen et al. 2011; Knight and Trowler 2000). For instance, strong, convergent, and disciplinary subcultures have been reported to be able to maintain their relative independence from institutional pressures of HEI management (Haapakorpi 2011). The sense of belonging to a subculture with its own educational values, working ethos and commitment, can hamper the development of an overall quality culture if the quality culture values are experienced by staff as not being in line with the values of their subculture (Skelton 2012). The emphasis of quality management on 'control' rather than 'improvement' is generally reported by (academic) HEI staff as a factor inhibiting the development of a quality culture, since it conflicts with their autonomy and professional values (Davies et al. 2007; Kanji and Tambi 1999; Newton 2002; Trivellas and Dargenidou 2009). Moreover, the significance of research tasks also impacts the potential for development of quality culture since the status of education can also be undervalued from a normative point of view (Haapakorpi 2011). Significant other common denominators of institutions focusing on quality culture development are shared goal orientation, responsibility and valuing of educational quality (Kinzie and Kuh 2004; Lomas 2004; Skelton 2012).

Leadership and communication as binding internal context elements

The crucial role of leadership commitment to quality culture development has been underlined by various empirical studies (Ardi et al. 2012; Calvo-Mora et al. 2006; Flumerfelt and Banachowski 2011; Knight and Trowler 2000; Newton 2002; Osseo-Asare et al. 2005; Osseo-Asare and Pieris 2007). Studies conducted by Flumerfelt and Banachowski (2011) and Calvo-Mora et al. (2006) indicate that leaders are able to address impeding elements relating to the structural/managerial organisational context dimension: they influence the allocation of resources, clarify roles and responsibilities, create partnerships and influence people and process management. Moreover, especially leaders at the department level influence the development of quality culture through creating a climate of trust and shared understanding (Knight and Trowler 2000). Leadership styles focusing on creating a culture of collegiality and consultation are preferred over styles addressing quality issues through inspection and control (Davies et al. 2007; Osseo-Asare et al. 2005). Effective leaders are considered to be those able to fulfil multiple roles, i.e. motivator, vision setter, task masters and analyser (Smart 2003; Osseo-Asare and Pieris 2007).

In order to be able to disseminate initiatives which nurture a quality culture, HEI require appropriate communication channels (Lomas 2004). Osseo-Asare and Pieris (2007) identified a lack of sharing best practices, failing ICT structure and deficient reporting systems as important bottlenecks. A well-functioning communication infrastructure enables HEI management to consult, interact with and inform students and staff about policies and strategic directions (Osseo-Asare et al. 2005, Osseo-Asare and Pieris 2007; Sutic and Jurcevic 2012; Sahu et al. 2013). Leaders play an important role in the communication climate within the organisation, as they are able to spread messages as well as specific





expectations and instructions concerning responsibilities and tasks both vertically and horizontally (Flumerfelt and Banachowski 2011; Sahney et al. 2010; Sakthivel and Raju 2006). Their central role in the hierarchy, however, also entails the risk that leaders act as information gatekeepers who consciously or unconsciously withhold (strategic) information to staff (Osseo-Asare et al. 2005). In addition to providing staff with the basic information needed for core processes (timely data, information on policies, intelligence), communication within and across departments is essential to identify and proactively deal with feelings of misunderstanding which can evolve when organisational change processes are set in motion which impact the present (sub)culture (Newton 2002; Spencer-Matthews 2001).

The working mechanisms of a quality culture

Based on an analysis of various quality management interventions described in the reviewed articles, propositions are made here on the working mechanisms which influence HEI staff behaviour favourable for development of a quality culture. Specific focus lies on 'agency', that is the beliefs and reasons that staff draw on to justify action or inaction and 'relations', referring to human interaction and distribution of rights and powers (de Souza 2014).

Staff agency through fostering commitment and shared ownership

Commitment to education can be seen as a quintessential working mechanism of quality culture. Ardi et al. (2012) found that the commitment of Faculty's top management influences commitment at the department level. This suggests that commitment passes down hierarchical lines in the organisation and that commitment in lower levels (partly) stems from commitment at the top. It seems plausible to argue, however, that leadership and management commitment are in the first place a requirement relating to the organisational context (Newton 2002). Teaching and learning processes as well as the practical organisation of education are essentially results of first-line (inter)actions of academic staff, supportive staff and students. Although commitment of management is a necessary condition for top-down facilitation of quality culture development, in its own, it does not suffice. To be able to speak of an overall quality culture, there should be a commitment to educational quality and its continuous improvement throughout the organisation (Lomas 2004; Manochehri et al. 2012). Quality culture encompasses the agency of staff directly involved in (the organisation of) education. Commitment can be considered to be a determinant of agency through its enacting upon choice and behavioural actions. From an intrinsic motivation point of view, commitment is expected to increase if staff assumptions and values are in line with those effectuated by institutional management (Lomas 2004; Trivellas and Dargenidou 2009). A lack of employee commitment might be a consequence of a lack of involvement of staff in organisational decision making. In addition, quality culture development is more likely to be successful in case its appeals to staff members' professionalism and motivation to improve (Davies et al. 2007). Staff commitment can also be stimulated through extrinsic triggers, e.g. through recognition and providing incentives, allocating grants to educational projects, awarding teacher prizes and offering opportunities for career tracks based on teaching performance (Calvo-Mora et al. 2006; Skelton 2012).

The presence of subcultures in HEI become an impeding factor for quality culture development in case subculture members have a strong inbound view and make use of their



belonging to a strong group to frustrate policies. If staff do not feel they 'own' educational programmes, their attitude towards quality management is more likely to be negative and unfruitful (Spencer-Matthews 2001). By emphasising shared ownership based on collegiality and consultation of staff across various disciplines and departments, chances of best practices remaining localised can be reduced. The mechanism of shared ownership as contributor to quality culture development is illustrated by initiatives such as learning communities, which create opportunities for staff to create an optimal social and academic learning environment (Smith and MacGregor 2009). Moreover, shared ownership and decision making by staff members of different departments allows for provision of mutual support and reinforcement of the teacher identity (Davies et al. 2007). Cross-functional collaboration and breakdown of barriers between academic and supportive staff through partnering and teamwork can be seen as quality management interventions influencing quality culture development by addressing the mechanism of shared ownership (Sahney et al. 2010).

Optimising human relations: increasing staff knowledge and empowerment

Staff knowledge of HEI educational plans, strategies and objectives, is essential for the nurturing of a quality culture (Skelton 2012; Sutic and Jurcevic 2012). In terms of structure and processes, the roles, responsibilities and instructions regarding job tasks of staff members need to be clear. Sharing of knowledge allows for creating an increased awareness among staff on both the investments needed as well as the benefits which can be derived from a quality culture. HEI staff members are usually active in several activity systems, with the academic department or subunit being the main activity system (Kleijnen et al. 2011). The structural divide between staff in departments and the existence of subcultures can hamper opportunities to increase staff knowledge on both good practices as well as problems in teaching and learning (Knight and Trowler 2000). The value of knowledge sharing across departments in HEI lies not only in the exchange of information on practices which have a more or less direct impact on educational processes. Discussion of the philosophy and methods for developing a quality culture are also needed to be able to spread interest and enthusiasm (Horine and Hailey 1995). Working on quality culture through optimising the exchange of present expertise can be considered one way to invest in learning processes (Haapakorpi 2011). In addition, engaging quality experts for the delivering of training can prove worthwhile in fostering increased staff knowledge (Kanji and Tambi 1999).

A final working mechanism of quality culture entails academic and administrative staff empowerment. Empowerment is viewed as distinctive from involvement as the latter is regarded as a component of the organisational context and refers to representation of HEI staff in decision making or advisory bodies. Sahney et al. state that 'employee participation and involvement is the process of empowering the members of the organisation to make decisions and to solve problems appropriate to their levels in the organisation' (Sahney et al. 2010, p. 67). Whereas participation and involvement can be seen as important elements in the organisation of processes, it is through empowerment as a mechanism that changes can be achieved. Empowerment holds the devolving of control mechanisms to staff members (Spencer-Matthews 2001). Osseo-Asare and Pieris (2007) found that suggestions to improve academic quality were not used, as staff was not granted sufficient autonomy—over determining—teaching—methods. This indicates the existence of a misalignment between staff responsibility, authority and chances for development of a





quality culture. The empowerment of employees fits with the generally accepted view that quality culture development requires a bottom-up approach (Osseo-Asare and Pieris 2007).

Quality culture and its associated outcomes

Various studies on interrelationships between structural/managerial, leadership, communication and cultural/psychological quality culture elements conclude that an integrative and simultaneous addressing of these elements contribute to achieving results of enhanced educational processes and outcomes (Ali and Musah 2012; Burli et al. 2012; Osseo-Asare et al. 2005). Ali and Musah (2012) explicitly investigated the relationship between the notion of 'quality culture' and organisational performance. They concluded that 'when universities establish a quality culture-oriented workplace, academic staff are more likely to be satisfied with the nature of their professional academic life and therefore work constructively for the cause of organisational success' (Ali and Musah 2012, p. 305). The finding that job satisfaction of academic and supporting staff is both a result of a quality culture as well as a determinant of staff performance is supported by other studies as well (Sahney et al. 2010; Trivellas and Dargenidou 2009). In addition to staff satisfaction, satisfaction of students is an important outcome of quality culture. Ardi et al. (2012) found that student satisfaction is positively influenced by commitment of faculty management and the ability of students to provide feedback for quality improvement. Research by Cameron and Freeman (1991) and Smart and St. John (1996) revealed that 'clan' organisational subculture types, which are characterised by loyalty, strategic emphasis on human resources, cohesion and leaders in the role of facilitator/mentor are most strongly associated with both staff (administrative and academic) and student satisfaction.

Structural/managerial processes aimed at continuous improvement of teaching and learning have been reported earlier in this study to contribute to quality culture development. The continuous improvement of teaching–learning *processes* can be seen as an 'intermediate' outcome of the embedding of a quality culture in HEI (as the actual improvement of teaching and learning is difficult to reveal). Various studies provide insights in the interrelationships between quality culture elements and (perceived) quality of process management as an outcome measure (Burli et al. 2012; Calvo-Mora et al. 2006; Kleijnen et al. 2011; Trivellas and Dargenidou 2009). Leadership is found to be an overall driving factor for quality culture development, while policy and strategy, people management and partnerships and resources influence the perceived effectiveness of process management directly (Burli et al. 2012; Calvo-Mora et al. 2006). Systematic approaches to quality management, such as adoption of TQM models, have been reported to contribute to increased student performance, better services and reduced costs (Kanji and Tambi 1999). However, these structural/managerial approaches can trigger adverse effects in case they are not aligned to the present culture (Skelton 2012; Sulaiman et al. 2013).

A third domain of quality culture outcomes is manifested in student, academic staff and administrative staff learning and development. The cooperation and shared commitment to educational quality of a mix of academic and support staff as well as involved students contributes to the establishment of an organisational learning environment (Haapakorpi 2011). Ali and Musah point to the centrality of learning and development as an (intermediate) outcome of quality culture by stressing that 'achieving quality in staff performance requires advanced and dynamic staff training programmes [...] to respond quickly and appropriately to rapid changes in the field of education and staff needs' (Ali and Musah 2012, p. 291). An 'adhocracy' organisational subculture type, which is consistent with core



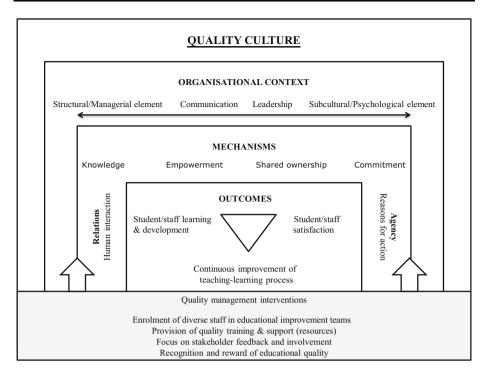


Fig. 3 Context-mechanism-outcome configuration of quality culture in HEI

values of scholarship and values of academic staff (i.e. flexibility, freedom and individual discretion, creativity and growth), was found to impact most on student academic and professional development and quality of staff in a study conducted among 334 HEI in the U.S. (Cameron and Freeman 1991). In addition, the interaction between staff and students is important for learning and development. Kinzie and Kuh (2004) revealed that HEI with high completion rates are characterised by staff and students closely working together to maintain study success.

Figure 3 outlines the context—mechanism—outcome configuration of quality culture in HEI. It sketches the main classification of promoting and inhibiting elements relating to the organisational context (structural/managerial, communication, leadership, cultural/psychological), working mechanisms (knowledge, empowerment, shared ownership and commitment) and quality culture outcomes (student/staff satisfaction, continuous improvement of the teaching—learning process and student/staff learning and development). In addition, examples of quality management interventions are included which illustrate the potential to affect the organisational context elements through addressing mechanisms of human relations and agency.

Conclusion

Quality culture in HEI results from an interplay between contributing organisational context elements, working mechanisms and quality related outcomes. HEI attempts to address the structural/managerial dimension of quality culture are reflected in their



attention to improvement strategies, evaluation systems, staff and student involvement, student centeredness and attention to policies, procedures and responsibilities. Along with the counterparts of these basic facilitators for quality culture development, the hierarchy in HEI, their structural division in departments and need to balance research and education tasks, form impeding elements. While the necessity to invest in structural/managerial elements is apparent, efforts to nurture a quality culture have proven to fail in case they neglect its subculture/psychological dimension. A quality culture is a specific kind of organisational subculture which overlaps with other subcultures based on shared educational values of its members, a people-oriented focus and valuing of autonomy and professionalism. The subcultures in HEI form a potential asset as different culture types are related to various effectiveness criteria. Strong disciplinary and research-oriented subcultures, however, can hamper quality culture development as they encompass an inbound view, whereas quality culture entails transcending structural and subcultural boundaries.

Leadership is an organisational context element which 'binds' the structural/managerial and cultural/psychological elements through creating trust and shared understanding. Leaders within HEI act as central drivers to quality culture development by affecting the allocation of resources, clarification of roles and responsibilities, creation of partnerships and influencing people and process management. Effective leaders are considered to be those who are able to take on multiple roles, i.e. motivator, vision setter, task masters and analyser. Communication serves as a second binding organisational context element. First, since communication enables the distribution of strategies, policies and responsibilities. Second, since it is through communication that staff acquires information on best practices, is able to evaluate core processes and signal points of improvement. Third, because communication is vital to identify and deal with diverging value orientations among staff.

The most important working mechanisms of a quality culture in HEI involve relations (human interaction) and agency (reasons for action). Commitment as a mechanism implies a willingness to put extra effort into ones work and a tendency to be concerned with its quality. Commitment emerges from providing incentives to staff, involving them in organisational decision making, alignment of staff and management values and an appeal to staff expertise. Shared ownership reflects the mutual responsibility for quality culture development in HEI. It contributes to quality culture development by facilitating peer support and reinforcement of the teacher identity. Staff knowledge, a third mechanism, is essential for identifying and resolving bottlenecks in teaching and learning. Staff empowerment, a fourth identified mechanism, holds that staff have the opportunity to initiate educational improvements. It impacts staff leeway to bring their experience and expertise into practice.

The multifaceted and integrative nature of a quality culture encompasses that it is difficult to provide one-on-one claims on outcomes associated with its embedding in HEI. Most empirical research concentrates on 'hard', directly observable, quality culture elements. The (perceived) improvement of quality of teaching and learning processes is reported as main beneficial outcome of devoting to the structural/managerial quality culture elements. Student and staff satisfaction as quality culture outcomes stem to a more considerable degree from the cultural/psychological (value) dimension of quality culture. Especially commitment of staff, student involvement and ability of students to provide feedback for improvement determine student satisfaction. Academic and supportive staff satisfaction can be considered a vital quality culture outcome, since satisfied staff is more likely to constructively contribute to achieving organisational goals. The ingrained climate of close staff and student interaction and cooperation is exemplary for a quality culture and contributes to organisational learning, staff and student personal development and study success.



Discussion

The present study nuances the picture of quality culture as a monolithic entity characterised by shared values, beliefs and expectations towards quality (EUA 2010). The results are in line with the view that a quality culture is a complex, socially constructed phenomenon which cannot be seen in isolation from the specific context in which it is embedded and cannot be simply transferred from one organisation to the other (Harvey and Stensaker 2008). The positive relationship between quality culture development and presence of various subcultures in HEI is further underpinned in the work of Berings (2009). His research indicates that multiple organisational culture profiles have a predictive value for effective quality management implementation and the degree of student and staff satisfaction. It is therefore worthwhile to raise awareness of the present basic beliefs and subculture values of different HEI staff groups, as staff being part of various subcultures might lack the natural bonds to work together on quality culture development (Haapakorpi 2011). Instead of challenging potentially conflicting beliefs and values, the focus should lie on attempts to bundle expertise and work on a state of shared commitment to educational quality (Lomas and Nicholls 2005). The complex structure and culture of HEI indicates an urge for leaders who are able to balance differences in management, staff and student interest. The most appropriate leadership style would be one which is sensitised to the procedures and practices, values and specific requirements of staff (Kleijnen et al. 2011; Kekale 2000). The relevance of leadership for the development of quality culture is indisputable, yet it is perhaps best captured by the statement that 'a quality culture cannot be implemented from above although strong leadership may be necessary to start and promote the process in the first place' (Katiliute and Neverauskas 2009, p. 1073). The proposed 'working mechanisms' of a quality culture in this study are in congruence with the essential effectiveness dependence of HEI on human capital (Trivellas and Dargenidou 2009). The proposed mechanisms provide insight in underlying reasons for staff behaviour in HEI in a broad sense. It should be taken into account that individual needs can differ (e.g. since differences can exist in experience and ambition). Therefore, interventions aimed at triggering the proposed working mechanisms should be sensitive to both the expectations of HEI management as well as staff. Agreeing on a 'psychological contract', based on a process of enquiry and negotiation in which HEI management, students and staff make their expectation's explicit and come to a workable agreement on how to nurture a quality culture, might prove a valuable exercise (Rowley 1996).

Theoretical and practical implications

Whereas review studies are considered appropriate for addressing the question 'what intervention practices work for whom in what circumstances', the present study contributes to the further untangling and theory development on quality culture by addressing the 'why' question of social intervention programmes (Pawson and Manzano-Santaella 2012). Based on both qualitative and quantitative research results, the study provides empirical support for the thesis that quality culture can assume various shapes. In a practical sense, the study implies that a diagnosis of the specific context and subcultures present across departments and disciplines is needed. Once the subcultures, their assets, pitfalls and potentially contradicting meanings attached to 'quality' have been brought to surface, quality practices can be developed which optimise the conditions for continuous educational quality improvement (Tam 2001). The study calls to draw attention to leadership and





communication, as these organisational context elements might prove more straightforward to alter, in comparison to structural/managerial and cultural/psychological elements.

Study limitations

The research reported in this study has some limitations which should be taken into account. Due to publication bias, studies with overly positivistic or negativistic results might be overrepresented in the articles included for review (Davies 2000). In addition, despite the involvement of various authors in the selection process for final inclusion of articles, the review process remained to some degree subjective and interpretive. As the article aimed to improve the understanding of quality culture and the grounding of its merit based on empirical research findings, it refrained from in-depth analysis of (valuable) theoretical studies on quality culture. The study focused on quality culture within HEI and moved past processes that influence HEI or take place between the academic world and society at large (Välimaa 1998). The role of external quality assessment and national legislation, for instance, has an ample influence on organisational functioning, by impacting on organisational policies, financing and perhaps even organisational cultures (Brennan and Shah 2000). The 'internal' focus was chosen to reflect HEI abilities to influence the internal organisational context elements (unlike external context elements) and quality management in order to develop a quality culture. External quality management was also excluded since it has a stronger tendency to serve accountability purposes.

Suggestions for further research

Provided that there is relative shortage of research into the synergy between 'hard' (structural, managerial), 'soft' (cultural, psychological) quality culture elements and associated outcomes (e.g. quality of the teaching-learning process), the added value of conducting empirical research in this field is apparent. More specifically, research into the daily experiences of staff and students in quality management as well as exploring their practical suggestions to nurture a quality culture deserves further stimulation.

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Appendi	x 1:	Kev	systematic	search	terms
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Key concept 1	Key concept 2	Key concept 3	Key concept 4
Quality culture	Quality management	Higher education	Improve*
Culture*	Quality system*	HEI*	Organi*ation* effective*
Subculture*	Quality management system*	Higher education institut*	Enhance*
Organi*ation* subculture	Total Quality Management	Universit*	Perform*
Corporate culture*	TQM	College*	Effective*
Corporate climate	Quality assurance	Universities and colleges	Perform* effective*



Key concept 1	Key concept 2	Key concept 3	Key concept 4
Organi*ation* culture	Quality control	Campus	Innovat*
Organi*ation* climate	Quality dimension*	Tertiary education institute*	Education* improve*
Institut* culture*	Quality assessment	Post-secondary education	Education* effective*
Institut* climate	Continuous improve*	Tertiary education	Curriculum development
Academic culture*	Education* quality	Faculty	Quality develop*
Disciplin* culture*	Quality management implementation	Education* organi*ation*	Quality
Faculty culture*			Develop*
Faculty value*			
Staff values			
Academic value*			
Quality value*			
Norms			
Values			
Institute* charact*			
Organi*ation* charact*			
Corporate* charact*			
Culture type*			
Cultur* approach			
Organi*ation* value*			
Identit*			



Appendix 2: Inclusion and exclusion criteria

Inclusion	Exclusion
General study characteristics	
Peer-reviewed journal article	Book chapters
	Conference proceedings
Language full article in English	Language full article only Non-English
Publication date 1980-current	Publication prior to 1980
Full access to article via internet	No full access via internet
Study content (main focus)	
Higher education	Non higher education
	Research in Higher Education
	Industry an business institutions
	Primary and secondary education,





Inclusion	Exclusion
	PhD education
Internal (institutional) quality management	External quality management (accreditation/benchmarking/rankings)
	Supra-organisational level
Elements influencing quality management practices or educational improvement	Quality assessment/evaluation instruments
	Quality assessment/evaluation outcomes
	Measuring service quality
In-class education	E-learning
Study methodology	
Incorporate qualitative or quantitative empirical data (interviews, questionnaires, document analysis, structured literature reviews)	Conceptual/theoretical papers
	Descriptive case studies (narrative, without data)

Appendix 3: Promoting and inhibiting organisational context factors impacting quality culture

See Table 1.

Table 2 Overview of main references for identified promoting and inhibiting organisational context elements

Organisational structure/managerial elements	
Promoting elements	
Strategy of continuous improvement	Kanji and Tambi (1999), Osseo-Asare and Pieris (2007), Sahney et al. (2010)
Quality management systems	Doval and Bondrea (2011), Kanji and Tambi (1999), Sahney et al. (2010)
Staff/student involvement in organisational decision making/consider evolving student demands	Ardi et al. (2012), Doval and Bondrea (2011), Kinzie and Kuh (2004), Sulaiman et al. (2013)
Clear policies, procedures, systems, responsibilities	Burli et al. (2012), Sahney et al. (2010)
Inhibiting elements	
Hierarchical structure/structural division	Horine and Hailey (1995), Kleijnen et al. (2011)
Lack of staff/student involvement in organisational decision making/neglect of evolving student demands	Doval and Bondrea (2011), Newton (2002), Spencer-Matthews (2001)
Lack of policies, procedures, systems, responsibilities	Flumerfelt and Banachowski (2011), Osseo-Asare et al. (2005), Sutic and Jurcevic (2012), Valiuskeviciute and Ziogeviciute (2006)
Lack of resources	Haapakorpi (2011), Horine and Hailey (1995), Kanji and Tambi (1999), Osseo-Asare et al. (2005)



Table 2 continued

Top-down (managerial) approaches to quality Haapakorpi (2011), Horine and Hailey (1995), management implementation Flumerfelt and Banachowski (2011), Newton (2002), Spencer-Matthews (2001), Sutic and Jurcevic (2012), Valiuskeviciute and Ziogeviciute (2006)Research focus Lomas (2004), Osseo-Asare et al. (2005), Skelton (2012)Organisational subculture/psychological elements Promoting elements

Flexible, people-oriented cultures

Presence of various cultures Shared (educational) quality values

Inhibiting elements

Rigid, control-oriented cultures

Presence of strong disciplinary cultures Research culture/undervaluing education

Leadership elements

Promoting elements

Leadership commitment and skills

Allocate resources

Create partnerships, influence people and process

Create climate of trust and shared understanding Ability to perform multiple roles Setting and communicating policies

Inhibiting elements

Lack of leadership commitment and skills Focus on inspection and control Acting as communication gatekeepers

Communication elements

Promoting elements

Communication/information for quality Provide information on strategies and policies Clear tasks requirements and responsibilities

Inhibiting elements

Lacking communication/information for quality Lack of sharing best practices across the organisation

Lack of appropriate communication channels

Cameron and Freeman (1991), Horine and Hailey (1995), Smart and St. John (1996), Trivellas and Dargenidou (2009)

Cameron and Freeman (1991), Smart (2003) Kinzie and Kuh (2004), Lomas (2004), Skelton (2012)

Cameron and Freeman (1991), Smart and St. John (1996), Trivellas and Dargenidou (2009)

Haapakorpi (2011), Skelton (2012)

Haapakorpi (2011), Lomas (2004), Newton (2002), Skelton (2012)

Ardi et al. (2012), Burli et al. (2012), Calvo-Mora et al. (2006), Flumerfelt and Banachowski (2011), Knight and Trowler (2000), Newton (2000)2, Osseo-Asare et al. (2005), Sahney et al. (2010), Sakthivel and Raju (2006)

Davies et al. (2007), Horine and Hailey (1995), Kanji and Tambi (1999), Newton (2002), Osseo-Asare et al. (2005)

Calvo-Mora et al. (2006), Lomas (2004), Manochehri et al. (2012), Newton (2002), Osseo-Asare et al. (2005), Sahney et al. (2010), Sakthivel and Raju (2006), Sutic and Jurcevic (2012)

Newton (2002), Osseo-Asare and Pieris (2007), Spencer-Matthews (2001), Sulaiman et al. (2013), Sutic and Jurcevic (2012)





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