

# People-related TQM practices: the role of metaperceptions

People-related  
TQM practices

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## Abstract

**Purpose** – The authors investigate the role of people-related Total Quality Management (TQM) practices, specifically metaperceptions, in hearing care students' vocational decision-making. In Italy, audiologists are health professionals and must hold a degree in hearing care. They operate according to clinical principles but must also develop marketing and commercial skills. While employers take these aspects for granted, the expectations of hearing care students often differ from reality. Thus, the authors aim to investigate the vocational expectations of hearing care students.

**Design/methodology/approach** – A survey was distributed to 600 hearing care students. Multiple regression analysis with bootstrapped confidence intervals was employed to test the hypotheses.

**Findings** – Students who perceived audiology as their calling were more interested in the clinical aspects than the marketing and commercial aspects of audiology. Moreover, those desiring a meaningful career path in audiology were more interested in becoming a store owner or franchisee.

**Social implications** – Universities and recruiters should consider the influence of relevant others' metaperceptions on students' self-perceptions of their aptitudes for different careers. Universities should assist students to identify aptitudes that are relevant to career-related decision-making. In this context, people-related TQM can help students avoid incorrect aspirations and expectations.

**Originality/value** – This study is the first to investigate the role of metaperceptions from a people-related TQM perspective. Metaperceptions play a crucial role in determining the correct course of study as well as job satisfaction and expectations.

**Keywords** Total quality management, Students, Human resource management, Health care

**Paper type** Research paper

## 1. Introduction

### 1.1 Study background

In the current uncertain and volatile labour market, making a career choice is challenging (Gatrell, 2004; Metheny and McWhirter, 2013; Ślebarska and Flakus, 2021). Thus, it is important to understand that individuals' career aspirations are influenced by their self-perceptions (Fischlmayr, 2002; Tovar-Murray *et al.*, 2021), including those of their career-related abilities (Hollinger, 1983). Further, researchers have found an interesting and unique relationship between people-related total quality management (TQM) practices and employees' attitudes (Ebrahimi *et al.*, 2015; Glaveli *et al.*, 2021). To the best of our knowledge, this relationship has never before been examined in students. Rather, students' career choices are influenced by the support (Zhang *et al.*, 2021) and pressure (Keller and Whiston, 2008; Taylor and Betz, 1983) from relevant others (e.g. parents, friends and

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partners) in relation to career choice can lead to career preference modifications or even career compromises (Keller and Whiston, 2008; Taylor and Betz, 1983), which are defined by a disparity between aspirations and actual choices (Tsaousides and Jome, 2008). Sometimes, these pressures lead to career preference modification or even compromise, characterised by a discrepancy between an individual's aspirations and actual career choice (Amin *et al.*, 2014; Tsaousides and Jome, 2008). To the best of our knowledge, research on the effect of relevant others' metaperceptions—that is, a person's beliefs about the perceptions held by another person (Campagna *et al.*, 2019)—on one's self-perception of being suitable for or having the right aptitudes for a specific career is missing from the vocational literature.

People are aware of how they are perceived by others, and the level of this awareness has been examined in a range of fields (Bollich *et al.*, 2015). In sociology, self-perceptions are the result of people's perceptions of how they are perceived by others (Shrauger and Schoeneman, 1979). Metaperceptions can also influence individual variables such as motivation and self-efficacy as well as organisational variables such as leadership trust and interpersonal conflicts (Campagna *et al.*, 2019; Jackson and Beauchamp, 2010). Depending upon the empirical setting, metaperceptions can also influence university students' self-perceptions (Rattan *et al.*, 2018).

### *1.2 Research analysis*

Choosing a career is difficult (Arunachalam and Palanichamy, 2017), especially when competing institutional logics are at play (Thornton and Ocasio, 2008), such as in the healthcare industry (Askfors and Fornstedt, 2018; Timmermans and Oh, 2010). In this context, career decisions must be made with respect to a diverse range of jobs that involve different levels and types of institutional logics, such as professional v. corporate logic (Askfors and Fornstedt, 2018). A career as a pharmacist, for instance, may be pursued in either a multinational corporation or a traditional private drugstore (Goodrick and Reay, 2011). Apart from competing institutional logics, the individual desire for meaning and purpose, which are crucial for job satisfaction, play a prominent role in the health professions (Duffy *et al.*, 2011).

There are two relevant gaps in the literature. First, research on the role of metaperceptions in career evaluation and choice is lacking. Second, research on the role of calling and the desire for meaning in professional contexts characterised by strong competing institutional logics (e.g. health care) is scanty. To fill these gaps, we investigated the role of metaperceptions in the vocational appraisal and decision-making of individuals considering a career in a health profession with competing institutional logics. We chose the empirical context of audiology, which is currently facing commodification and corporatisation pressures (Farris and Marchetti, 2017). Finally, we attempted to separate the impact of metaperceptions from individuals' desire for meaning and calling in their future employment.

## **2. Literature review**

Dik and Duffy (2009, p. 427) define one's "vocation" as:

a transcendent summons, experienced as originating beyond the self, to approach a particular life role in a manner oriented toward demonstrating or deriving a sense of purpose or meaningfulness and that holds other-oriented values and goals as primary sources of motivation.

This sense of being predestined for a specific career is referred to as a "calling" by management experts (Bunderson and Thompson, 2009; Duffy *et al.*, 2014; Zhang and Hirschi, 2021; Zhang *et al.*, 2021). This definition of "calling" and its impact on organisational factors (e.g. person–job fit) has been substantiated by numerous empirical studies (Bunderson and Thompson, 2009; Hagmaier and Abele, 2012).

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Other definitions of vocation, while often including a component of meaning or purpose, describe the concept as an internal personal impulse towards self-fulfilment. For example, [Dobrow and Tosti-Kharas \(2011\)](#) define vocation as a burning and meaningful passion for a particular career or occupation. [Hall and Chandler \(2005\)](#) describe vocation as the work that a person perceives to be their purpose in life. Therefore, the concept of finding meaningfulness or a career in which one feels “worthwhile, useful, and valuable—as though they [make] a difference” ([Kahn, 1990](#), p. 704) is key to influencing career preferences. Studies suggest that the search for meaningfulness can lead to choosing an unconventional career ([Bunderson and Thompson, 2009](#)) and that health professions are perceived as meaningful ([Vuori \*et al.\*, 2012](#)). Thus, it may be argued that both calling and meaningfulness influence vocational choice in the health professions ([Duffy \*et al.\*, 2011](#)).

We developed our study framework based on the vocational and health profession literature to obtain insights into the role of metaperceptions in determining individuals’ self-perceptions of their career aptitudes, particularly in health professions such as audiology. Given that many areas of health are currently under intense corporatisation pressure, many health professions are facing substantial commercialisation ([Goodrick and Reay, 2011](#)) and commodification ([Pellegrino, 1999](#)). The choice to become a healthcare professional is often connected with an adherence to a set of professional practices ([Goodrick and Reay, 2011](#)) and values ([Shaw and Degazon, 2008](#)). This strong connection between professional practices and values means that many healthcare professionals have moved from having a vocation to having a profession ([Hallam, 2002](#)).

Healthcare professions are frequently selected as a vocation or meaningful career. However, professions such as pharmacy or audiology often involve contradictory practices and ideals. First, health professionals may choose a career path that emphasises the professional aspect, such as being self-employed or working alone or in a small group of professionals and having autonomous control over work procedures that adhere to professional norms (e.g. working in or running a small private pharmacy) ([Goodrick and Reay, 2011](#)). Professional logic involves two main career interests: (1) a focus on medical/professional knowledge and practice ([Ramia \*et al.\*, 2016](#)) or (2) entrepreneurial activities conducted to manage a business on one’s own or in association with other professionals ([Mattingly \*et al.\*, 2019](#)). In contrast, health professionals may choose to work according to corporate logic, which involves two different career interests: (1) a focus on the marketing and commercial aspects of the health profession or (2) the desire to work as an employee in large organisations ([Goodrick and Reay, 2011](#)). Therefore, we argue that individuals interested in pursuing a healthcare career must evaluate their career orientation and place themselves along one of two continuums that represent different institutional logics, namely: (1) the medical/professional v. market/commercial or (2) self-employed/entrepreneurial v. employed/corporate.

### 3. Study framework and hypotheses

Various institutional logics can be related to individual-level calling and meaningfulness. The links between these logics and individual-level calling and meaningfulness are at the heart of the formulation of our hypotheses.

First, the medical/professional rationale is built on the beliefs and identities of people who see the medical field as their calling. That is, “if one’s calling was to promote the health and well-being of the underprivileged in society, then being a nurse, doctor, social worker, pharmacist, or other forms of healthcare worker could potentially offer a way to answer that call” ([Elangovan \*et al.\*, 2010](#), p. 432). Further, those individuals who consider working as a health professional a vocation or calling have professional values and identities ([Raatikainen, 1997](#)).

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Second, the self-employed/entrepreneurial approach to health care, such as owning a pharmacy or becoming an audiology franchisee, involves various traits linked with meaningful work, including autonomy, flexibility, empowerment, constant learning, risk-taking and innovation (Chalofsky, 2003). Further, several studies have linked the decision to be self-employed or an entrepreneur with higher levels of job satisfaction (Stumpf and Tymon, 2001; Wolfe and Patel, 2019). Thus, our first two hypotheses are as follows:

- H1. The perception of one's future career as a calling is positively related to one's self-perception of having an aptitude for a career characterised by medical/professional logic.
- H2. The desire for meaningfulness in a future career is positively related to one's self-perception of having an aptitude for a career characterised by self-employed/entrepreneurial logic.

### *3.1 Metaperception as a driver of career preferences in the health professions*

Metaperceptions are a person's ideas about another person's thoughts, attitudes or perceptions (Campagna *et al.*, 2019). They can also refer to a person's thoughts about how others perceive them, such as how others view their professional performance (Durairatnam *et al.*, 2021; Hu *et al.*, 2014). In other words, individuals can assess their own behaviours and imagine how others would react to them, without considering the behaviours and emotions of others. This is similar to the self-perception process (Bem, 1967) in which people observe themselves to learn about their internal states such as their opinions and preferences. However, as Felson *et al.* (1992) point out, the observation process may be more complicated than previously thought. People can observe their own behaviours and form an opinion about them (self-perception). They may also presume that others will view their actions in the same light. As a result, rather than relying on others' assessments of their actions, they construct their own assessments of themselves and believe that others' assessments will be similar or identical. People's perceptions of how others see them are also founded on their own self-perceptions (Kenny and DePaulo, 1993). This perspective of metaperceptions is supported by empirical findings (Fazio *et al.*, 1984; Sanitioso and Wlodarski, 2004). However, a recent empirical study has cast doubt on Kenny and DePaulo's (1993) conclusions, claiming that metaperceptions of performance are more closely related to the ideas of external evaluators than to internal self-perceptions of performance (Hu *et al.*, 2014). This research demonstrates that individuals can build an internal sense of how others perceive them. Further, this metaperception is (1) distinct from how individuals view themselves and (2) similar to how external evaluators assess individuals' performance (Hu *et al.*, 2014). Other studies suggest that metaperceptions can influence individual-level variables such as motivation and self-efficacy (Jackson and Beauchamp, 2010) and organisational variables such as trust in leadership and interpersonal conflicts (Campagna *et al.*, 2019). Finally, they may also affect the self-perceptions of university students (Rattan *et al.*, 2018). Rattan *et al.*'s (2018) study is relevant to the development of our hypotheses, demonstrating that students' self-perceptions differ from their metaperceptions of their professors' perceptions, extending Kenny and DePaulo's (1993) findings. Further, students' self-perceptions are influenced by their metaperceptions of their professors' opinions (Rattan *et al.*, 2018).

Previous research suggests that pressure from relevant others (e.g. parents or friends) in relation to career choice can lead to career preference changes or even compromises (Keller and Whiston, 2008; Taylor and Betz, 1983), which refer to a disparity between one's aspirations and one's actual career choice (Tsaousides and Jome, 2008). However, research on the effect of the metaperceptions of relevant others' on individuals' self-perceptions of their career aptitudes is lacking in the vocational literature. Therefore, following more recent studies about metaperception, we propose the following hypotheses:

- H3. The metaperceptions of relevant others about an individual's aptitudes influence the individual's self-perceptions of their own aptitudes for medical/professional v. market/commercial professional logic.
- H4. The metaperceptions of relevant others about an individual's aptitudes influence the individual's self-perceptions of their own aptitudes for self-employed/entrepreneurial v. employed/corporate professional logic.

## 4. Methods

### 4.1 Empirical setting and the audiology profession

In this study, we surveyed students enrolled in an audiology degree course entitled Hearing Care Techniques (HCT). Under Italian law, audiologists are considered health professionals because they hold a qualification and undertake prevention, diagnosis, treatment and rehabilitation activities. Audiology is different from other non-medical health professions because it is largely conducted in specialised retail stores. Therefore, audiologists in Italy are bachelor-qualified health professionals who must be listed in a professional register but are also salespeople who sell medical devices. This dual role may cause confusion for students enrolled in an audiology degree and lead to false expectations about the work they will do, which, in practice, is aimed more at sales than at health. Therefore, in Italy, audiology students have the highest employment rate within the first 6 months of graduating but also the highest dropout rate from the profession within 18 months of graduation (Clerici, 2006). In Italy, a total of 315 places are allocated to HCT courses, divided among 14 universities in 12 cities (see Table 1).

In Italy, audiologists face a dual role as both healthcare professionals and salespeople. In the latter role, their work is measured according to the number of items sold, the average price of sales, conversion rates, and other key performance indicators that are typical of multinational companies. Therefore, the audiology degree is an interesting context for examining students' vocational expectations and, more precisely, the metaperceptions of relevant others about students' career aptitudes in the presence of strong competing professional logics.

### 4.2 Participants and procedure

Our survey was distributed to a sample of 600 Italian students in the first, second and third years of an HCT degree. All students were enrolled in 2020. The surveys were personally

University	Available places
Bari	19
Catania	15
Messina	12
Milano	25
Napoli Federico II	15
Padova	50
Palermo	15
Parma	20
Pisa	20
Roma "La Sapienza"	15
Roma "Tor Vergata"	40
Roma Cattolica del Sacro Cuore	20
Torino	19
Treviso	30
<i>Total</i>	<i>315</i>

**Table 1.**  
Available places for  
degree course hearing  
care techniques 2021/  
2022 - Italy

administered by the researchers at the 14 universities that offer the HCT degree (see Table 1). In total, 466 completed questionnaires were returned, giving a response rate of 77.6%. Random convenience sampling of this number of potential respondents was fully justified and significant. The response rate was statistically satisfactory. In total, there were 466 respondents, most of whom were women (76.4%).

### 4.3 Measures

To test our hypotheses, we designed our survey using both existing scales and items specifically developed for the present study. Table 2 presents the reliability coefficients, means, standard deviations and bivariate correlations of all measures.

**4.3.1 Calling.** To measure respondents' perceptions of the search for and presence of calling for their future career considerations, we employed four items from the Brief Calling Scale (Dik et al., 2012). Namely, the presence of calling (*BCS-P*) was measured using "I have a calling to a particular kind of work" and "I have a good understanding of my calling as it applies to my career" ( $\alpha = 0.84$ ). Search for a sense of calling (*BCS-S*) was measured using "I am trying to figure out my calling in my career" and "I am searching for my calling as it applies to my career" ( $\alpha = 0.88$ ). Participants answered items on a five-point Likert-type scale ranging from *not at all true of me* to *totally true of me*.

**4.3.2 Meaningfulness.** To measure students' desired level of meaningfulness (*MEAN*) in their future careers, we adapted four items ( $\alpha = 0.92$ ) from the Psychological Meaningfulness Scale (May et al., 2004). Sample items were "The work I will do in my career has to be important to me" and "The career activities I will do in my career has to be significant to me".

**4.3.3 Individuals' perceptions of career aptitudes.** Individuals' perceptions of having an aptitude for a medical/professional v. market/commercial (*IPCAMED*) or a self-employed/entrepreneurial v. employed/corporate (*IPCAGENT*) career were measured using two single-item scales. For each scale, respondents were asked how they see themselves in their future careers in relation to the competing professional logics of medical/professional v. market/commercial and self-employed/entrepreneurial v. employed/corporate. Respondents were asked to read the following instruction:

Now we would ask you to think about how much you feel you have an aptitude for some different characteristics of the work and to place, because of your perception, a cross in the 10-point scale that distances the two characteristics. If you feel more inclined toward one of the two characteristics, obviously, you will place the tick closer to that characteristic.

Some vignettes were provided to exemplify the differences between the medical/professional v. market/commercial logics and self-employed/entrepreneurial v. employed/corporate logics.

Following these instructions, the first item was "I think that I have an aptitude for a career characterized by:" This was denoted on the scale as 1 = market/commercial logics and

Constructs	Mean	S.D	Alpha	1	2	3	4	5	6	7
1. MEAN	6.02	0.91	0.92							
2. BCS-P	4.47	1.33	0.84	0.14						
3. BCS-S	5.22	1.50	0.88	0.25	<u>-0.44</u>					
4. IPCAMED	3.06	1.95	-	-0.18	<u>0.33</u>	0.09 <sup>+</sup>				
5. IPCAGENT	4.20	1.82	-	0.17	-0.13	-0.14	-0.44			
6. MPCAMED	3.18	2.13	-	-0.18	0.29	0.11 <sup>+</sup>	0.77	-0.41		
7. MPCAGENT	4.25	2.12	-	0.14	-0.13	-0.13	-0.37	0.61	-0.44	

**Note(s):** Alpha = Cronbach's Alpha; SD = standard deviation

Underlined correlations are not significant. Correlations with+are significant at  $\alpha = 0.05$ . All the other correlations are significant at  $\alpha = 0.01$  (two-tailed)

**Table 2.**  
Means, standard deviations, interconstruct correlations, and internal consistency



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10 = medical/professional logics. The second item provided the same statement, with 1 = employed/corporate professional logics and 10 = self-employed/entrepreneurial logics.

4.3.4 *Metaperceptions of relevant others about individuals' career's aptitudes.* Metaperceptions of relevant others about students' aptitudes for a medical/professional v. market/commercial career or a self-employed/entrepreneurial v. employed/corporate professional career were measured using a similar logic to that of the previous variable. First, respondents were asked to read the following instruction

Now we would ask you to completely put aside what you answered in the previous section for a moment and try the following exercise. Think and choose in your mind a specific another person with whom you talk about your future work and topics such as your expectations about your career. We now ask you to think about which characteristics of the career the other person you have chosen thinks you have aptitudes for.

Then, the two items and scales (ranging from 1 to 10) presented above to measure *IPCA* but changed to refer to the perceptions of the chosen person were used to measure metaperceptions about the respondent's aptitude for a medical/professional v. market/commercial career (*MPCAMed*) or a self-employed/entrepreneurial v. employed/corporate professional career (*MPCAnt*).

#### 4.4 Data analysis

The following best practice and procedural remedies were employed to control for possible biases.

First, we controlled for common-method variance (Podsakoff *et al.*, 2003) during our survey design, data collection and ex post analyses. We ensured respondent anonymity and avoided items with elements of social desirability, demand characteristics and ambiguity (Podsakoff *et al.*, 2003). We also employed Harman's single-factor test (Podsakoff *et al.*, 2003) to control for ex-post common-method variance. One factor in the unrotated factor matrix explained 24.08% of the variance, substantially lower than the suggested 50% threshold, indicating that common-method bias was not a significant concern.

Second, we compared early and late respondents using analysis of variance to control for non-response bias. No significant differences were found between the two groups, suggesting that non-response bias was not a significant problem.

Finally, we tested our hypotheses using multiple regression analysis with bootstrapped confidence intervals in SPSS 23. The results are presented in Tables 3 and 4.

## 5. Results

We first regressed the independent variables *BCS-P* and *BCS-S* over the outcome *IPCAMed*, controlling for gender and age. H1 was supported, as shown in Model 2a. *BCS-P* had a positive and significant effect on individuals' perceptions of having an aptitude for the medical/professional logic and values of the audiology profession. However, the search component of calling (*BCS-S*) was not significant. This suggests that audiology students with a strong self-perception of having a calling for their future careers are more interested in the clinical aspects than in the marketing and commercial aspects of the profession. This characterises the typical audiologist's career position inside large and multinational hearing system companies.

Model 2b, in which the dependent variable was *IPCAent*, supported H2, showing that *MEAN* had a positive and significant effect on individuals' self-perceptions of having an aptitude for self-employed/entrepreneurial logics in the audiology profession. Therefore, individuals who are more interested in having a meaningful career path seem to be more interested in choosing the self-employed path of owning a shop or becoming a franchisee of a large company.

	Model 1a IPCamed B (s.e.)	Model 2a IPCamed B (s.e.)	Model 3a IPCamed B (s.e.)	Model 4a IPCamed B (s.e.)	Model 5a MPCamed B (s.e.)
<i>Controls</i>					
Constant	-0.58 (0.45) <sup>n.s.</sup>	-1.12 (0.43)*	-1.57 (0.53)**	-0.72 (0.01) <sup>n.s.</sup>	0.00 (0.48) <sup>n.s.</sup>
Age	0.15 (0.02)**	0.12 (0.02)**	0.11 (0.02)**	0.05 (0.00)**	-0.00 (0.02) <sup>n.s.</sup>
Gender	0.12 (0.22) <sup>n.s.</sup>	0.06 (0.22) <sup>n.s.</sup>	0.05 (0.21) <sup>n.s.</sup>	-0.04 (0.00) <sup>n.s.</sup>	0.10 (0.13) <sup>n.s.</sup>
<i>Independent variables</i>					
BCS-P		0.33 (0.07)**	0.34 (0.05)**	0.12 (0.00)*	0.06 (0.06) <sup>n.s.</sup>
BCS-S			0.09 (0.06) <sup>n.s.</sup>	0.01 (0.00) <sup>n.s.</sup>	0.06 (0.05) <sup>n.s.</sup>
MPCamed IPCamed				0.66 (0.04)**	0.82 (0.4)**
F	32.81***	30.75***	23.98***	150.19***	123.12***
Adjusted R <sup>2</sup>	0.12	0.16	0.17	0.62	0.60

**Note(s):** n.s. not significant; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

**Table 3.**  
Regression results for  
medical/  
professional logic

	Model 1b IPCAent B (s.e.)	Model 2b IPCAent B (s.e.)	Model 3b IPCAent B (s.e.)	Model 4b MPCAent B (s.e.)
<i>Controls</i>				
Constant	5.28 (0.60)**	3.20 (0.84)**	1.53 (0.70)*	1.07 (0.71) <sup>n.s.</sup>
Age	-0.05 (0.03) <sup>n.s.</sup>	-0.05 (0.03) <sup>+</sup>	-0.04 (0.02) <sup>+</sup>	0.01 (0.02) <sup>n.s.</sup>
Gender	0.00 (0.22) <sup>n.s.</sup>	0.08 (0.21) <sup>n.s.</sup>	0.21 (0.17) <sup>n.s.</sup>	-0.28 (0.18) <sup>n.s.</sup>
<i>Independent variables</i>				
MEAN		0.35 (0.10)**	0.18 (0.08)*	0.08 (0.09) <sup>n.s.</sup>
MPCAent IPCAent			0.51 (0.04)**	0.69 (0.05)**
F	3.02*	6.81***	70.70***	67.99***
Adjusted R <sup>2</sup>	0.01	0.04	0.38	0.37

**Note(s):** n.s. not significant; <sup>+</sup> $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

**Table 4.**  
Regression results for  
self-employed/  
entrepreneurial logic

Hypotheses H4 and H5 were also supported by our empirical evidence. Models 3b and 4a show that the metaperceptions of relevant others were strongly and significantly associated with *IPCamed* and *IPCAent*. The positive signs for both *MPCamed* and *MPCAent* indicate that both independent variables were correlated with individual self-perceptions of aptitude in the same direction. Therefore, the students' self-perceptions of their own aptitudes for either self-employed/entrepreneurial or medical/professional logics and values were aligned with the metaperceptions of relevant others. First, both *MPCamed* and *MPCAent* were positive and significant. Second, the models that included these variables displayed a relevant increase in the adjusted R-squared.

To verify whether [Kenny and DePaulo's \(1993\)](#) conclusions are supported by our findings, we tested Models 4b and 5a. In these models, we inverted individuals' self-perceptions with the metaperceptions of relevant others, making the latter the dependent variable and the former the independent variable. [Kenny and DePaulo \(1993\)](#) suggest that metaperceptions are influenced by individuals' self-perceptions, not the other way around. However, our findings appear to support the opposite conclusion. In fact, the models in which metaperceptions were considered the dependent variable displayed a lower adjusted



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R-squared. Moreover, all other control and independent variables (*BSC-P*, *BSC-S* and *MEAN*) had non-significant coefficients (see Models 4b and 5a).

## 6. Discussion, limitations and future research

We aimed to investigate the effect of the metaperceptions of relevant others on individuals' self-perceptions of their career-related aptitudes. The role of these metaperceptions is significant when individuals are thinking and making decisions about a professional career path that involves competing institutional logics.

This study shows that the effect of metaperceptions on individuals' self-perceptions of their career-related aptitudes in the presence of competing institutional logics is significant and stronger than the effect of other relevant variables (such as meaningfulness and calling) in the healthcare context. Our results suggest that metaperceptions influence self-perceptions in the context of careers characterised by competing institutional logics rather than the reverse, as proposed by [Kenny and DePaulo \(1993\)](#). To provide the most interesting example, introducing the metaperceptions of relevant others increased the explanatory power of the model by 9.5 times in terms of the adjusted R-squared.

Collecting self-reported perceptual data using a cross-sectional design can affect the validity of the study and only permits speculation about the correlations, even if substantial precautions are taken to reduce common-method variance. Future researchers should undertake longitudinal studies to overcome this issue.

Although we only examined one profession, almost all students enrolled in this degree in Italy participated in our study. Therefore, our sample strongly represented this health profession in the Italian context. Future researchers could expand the data collection to other professions characterised by competing institutional logics. Finally, there are opportunities for novel research to examine more deeply the role of metaperceptions in career choice and development. For example, it would be extremely useful if companies and universities conducted studies collaboratively with the goal of identifying possible personality types. This may assist future students in better understanding their talents, thus better expressing their potential.

Based on our findings, we recommend that employers do not underestimate the work expectations of this category of health professionals. Although sales and fittings are carried out by the same person in Italy, companies in this industry could employ salespeople to sell devices and audiologists to fit the devices. This would help to resolve the dual work of audiologists, who otherwise must carry out two highly different activities—sales and fitting. Future researchers could also examine whether this dual activity can be carried out by two different people from a legal standpoint. If this is not achievable in Italy, universities should be given the flexibility to develop a study program that provides students with a complete picture of what the work entails. As academics and university lecturers, we are confident that more informed pupils will eventually become more aware professionals. This will result in a reduced turnover of professionals in the industry, which is unfortunately common.

## 7. Theoretical and practical implications

Our study highlights that the metaperceptions of relevant others influence individuals' self-perceptions of their aptitudes for a future career, and this effect is stronger than the search for meaningfulness or the presence of a calling.

In our empirical setting, namely the Italian audiology profession, audiologists are faced with the downstream integration of firms establishing large retail chains. Companies must search for employees with satisfactory university qualifications and the right aptitudes for such a context. Therefore, people-related TQM becomes essential for both universities and

companies because it is critical that students and employees understand what to expect from the audiology career and be able to meet these expectations. In Italy, audiologists are increasingly called upon to carry out retail sales in place of paramedical services. In this context, as reflected by our results, metaperception becomes a key element influencing students' choices and possibly the job satisfaction of future workers.

Universities and recruiters should consider the role of people-related TQM and how metaperceptions influence individuals' self-perceptions of their own aptitudes for different professions, especially those characterised by competing institutional logics, which can involve different types of jobs. A major mission of universities should be to help students find their career aptitudes, which are related to career decision-making and choices (Austin, 2002; Papadimitriou and Boboc, 2021). The inherent difficulties in choosing a future career path are heightened by the fact that the new generation of workers, particularly those in professional careers, are increasingly motivated to search for meaningfulness in their work (Vogel *et al.*, 2019) and enter a career that is consistent with what they believe is their calling or vocation (Duffy *et al.*, 2011). This task is even more difficult in a career that is increasingly characterised by commodification and corporatisation.

## References

- Amin, M., Ismail, W.K.W., Rasid, S.Z.A. and Selemani, R.D.A. (2014), "The impact of human resource management practices on performance: evidence from a public university", *The TQM Journal*, Vol. 26 No. 2, pp. 125-142, doi: [10.1108/TQM-10-2011-0062](https://doi.org/10.1108/TQM-10-2011-0062).
- Arunachalam, T. and Palanichamy, Y. (2017), "Does the soft aspects of TQM influence job satisfaction and commitment? An empirical analysis", *The TQM Journal*, Vol. 29 No. 2, pp. 385-402, doi: [10.1108/TQM-03-2016-0023](https://doi.org/10.1108/TQM-03-2016-0023).
- Askfors, Y. and Fornstedt, H. (2018), "The clash of managerial and professional logics in public procurement: implications for innovation in the healthcare sector", *Scandinavian Journal of Management*, Vol. 34 No. 1, pp. 78-90, doi: [10.1016/j.scaman.2018.01.001](https://doi.org/10.1016/j.scaman.2018.01.001).
- Austin, A.E. (2002), "Preparing the next generation of faculty: graduate school as socialization to the academic career", *The Journal of Higher Education*, Vol. 73 No. 1, pp. 94-122, doi: [10.1080/00221546.2002.11777132](https://doi.org/10.1080/00221546.2002.11777132).
- Bem, D.J. (1967), "Self-perception: an alternative interpretation of cognitive dissonance phenomena", *Psychological Review*, Vol. 74 No. 3, pp. 183-200. available at: <https://psycnet.apa.org/doi/10.1037/h0024835>.
- Bollich, K.L., Rogers, K.H. and Vazire, S. (2015), "Knowing more than we can tell: people are aware of their biased self-perceptions", *Personality and Social Psychology Bulletin*, Vol. 41 No. 7, pp. 918-929, doi: [10.1177/0146167215583993](https://doi.org/10.1177/0146167215583993).
- Bunderson, J.S. and Thompson, J.A. (2009), "The call of the wild: Zookeepers, callings, and the double-edged sword of deeply meaningful work", *Administrative Science Quarterly*, Vol. 54 No. 1, pp. 32-57, doi: [10.2189/asqu.2009.54.1.32](https://doi.org/10.2189/asqu.2009.54.1.32).
- Campagna, R.L., Dirks, K.T., Knight, A.P., Crossley, C. and Robinson, S.L. (2019), "On the relation between felt trust and actual trust: examining pathways to and implications of leader trust meta-accuracy", *Journal of Applied Psychology*, Vol. 105 No. 9, pp. 994-1012, doi: [10.1037/apl0000474](https://doi.org/10.1037/apl0000474).
- Chalofsky, N. (2003), "An emerging construct for meaningful work", *Human Resource Development International*, Vol. 6 No. 1, pp. 69-83, doi: [10.1080/1367886022000016785](https://doi.org/10.1080/1367886022000016785).
- Clerici, M. (2006), *L'audioprotesista*, Edicola, Chieti, Italy.
- Dik, B.J. and Duffy, R.D. (2009), "Calling and vocation at work: definitions and prospects for research and practice", *The Counseling Psychologist*, Vol. 37 No. 3, pp. 424-450, doi: [10.1177/0011000008316430](https://doi.org/10.1177/0011000008316430).

- Dik, B.J., Eldridge, B.M., Steger, M.F. and Duffy, R.D. (2012), "Development and validation of the Calling and Vocation Questionnaire (CVQ) and Brief Calling Scale (BCS)", *Journal of Career Assessment*, Vol. 20 No. 3, pp. 242-263, doi: [10.1177/1069072711434410](https://doi.org/10.1177/1069072711434410).
- Dobrow, S.R. and Tosti-Kharas, J. (2011), "Calling: the development of a scale measure", *Personnel Psychology*, Vol. 64 No. 4, pp. 1001-1049, doi: [10.1111/j.1744-6570.2011.01234.x](https://doi.org/10.1111/j.1744-6570.2011.01234.x).
- Duffy, R.D., Manuel, R.S., Borges, N.J. and Bott, E.M. (2011), "Calling, vocational development, and well being: a longitudinal study of medical students", *Journal of Vocational Behavior*, Vol. 79 No. 2, pp. 361-366, doi: [10.1016/j.jvb.2011.03.023](https://doi.org/10.1016/j.jvb.2011.03.023).
- Duffy, R.D., Allan, B.A., Autin, K.L. and Douglass, R.P. (2014), "Living a calling and work well-being: a longitudinal study", *Journal of Counseling Psychology*, Vol. 61 No. 4, pp. 605-615, doi: [10.1037/cou0000042](https://doi.org/10.1037/cou0000042).
- Durairatnam, S., Chong, S.C., Jusoh, M. and Dharmaratne, I.R. (2021), "Does people-related total quality management 'work' for people? An empirical study of the Sri Lankan apparel industry", *The TQM Journal*, Vol. 33 No. 6, pp. 1183-1200, doi: [10.1108/TQM-06-2020-0140](https://doi.org/10.1108/TQM-06-2020-0140).
- Ebrahimi, Z.F., Wei, C.C. and Rad, R.H. (2015), "The impact of the conceptual total quality management model on role stressors", *Total Quality Management & Business Excellence*, Vol. 26 Nos 7-8, pp. 762-777, doi: [10.1080/14783363.2014.884302](https://doi.org/10.1080/14783363.2014.884302).
- Elangovan, A.R., Pinder, C.C. and McLean, M. (2010), "Callings and organizational behavior", *Journal of Vocational Behavior*, Vol. 76 No. 3, pp. 428-440, doi: [10.1016/j.jvb.2009.10.009](https://doi.org/10.1016/j.jvb.2009.10.009).
- Farris, S.R. and Marchetti, S. (2017), "From the commodification to the corporatization of care: european perspectives and debates", *Social Politics: International Studies in Gender, State and Society*, Vol. 24 No. 2, pp. 109-131, doi: [10.1093/sp/jxx003](https://doi.org/10.1093/sp/jxx003).
- Fazio, R.H., Herr, P.M. and Olney, T.J. (1984), "Attitude accessibility following a self-perception process", *Journal of Personality and Social Psychology*, Vol. 47 No. 2, pp. 277-286, doi: [10.1037/0022-3514.47.2.277](https://doi.org/10.1037/0022-3514.47.2.277).
- Felson, R.B., Lawler, E.J., Markovsky, B. and Ridgeway, C. (1992), "Coming to see ourselves: social sources of self-appraisals", *Advances in Group Processes*, Vol. 9 No. 2, pp. 185-205.
- Fischlmayr, I.C. (2002), "Female self-perception as barrier to international careers?", *The International Journal of Human Resource Management*, Vol. 13 No. 5, pp. 773-783, doi: [10.1080/09585190210125912](https://doi.org/10.1080/09585190210125912).
- Gatrell, C. (2004), *Hard Labour: the Sociology of Parenthood, Family Life and Career*, McGraw-Hill Education, Maidenhead, UK.
- Glaveli, N., Vouzas, F. and Roumeliotou, M. (2021), "The soft side of TQM and teachers job satisfaction: an empirical investigation in primary and secondary education", *The TQM Journal*, ahead of print, doi: [10.1108/TQM-11-2020-0269](https://doi.org/10.1108/TQM-11-2020-0269).
- Goodrick, E. and Reay, T. (2011), "Constellations of institutional logics: changes in the professional work of pharmacists", *Work and Occupations*, Vol. 38 No. 3, pp. 372-416, doi: [10.1177/0730888411406824](https://doi.org/10.1177/0730888411406824).
- Hagmaier, T. and Abele, A.E. (2012), "The multidimensionality of calling: conceptualization, measurement and a bicultural perspective", *Journal of Vocational Behavior*, Vol. 81 No. 1, pp. 39-51, doi: [10.1016/j.jvb.2012.04.001](https://doi.org/10.1016/j.jvb.2012.04.001).
- Hall, D.T. and Chandler, D.E. (2005), "Psychological success: when the career is a calling", *Journal of Organizational Behavior*, Vol. 26 No. 2, pp. 155-176, doi: [10.1002/job.301](https://doi.org/10.1002/job.301).
- Hallam, J. (2002), "Vocation to profession: changing images of nursing in Britain", *Journal of Organizational Change Management*, Vol. 15 No. 1, pp. 35-47, doi: [10.1108/09534810210417366](https://doi.org/10.1108/09534810210417366).
- Hollinger, C.L. (1983), "Self-perception and the career aspirations of mathematically talented female adolescents", *Journal of Vocational Behavior*, Vol. 22 No. 1, pp. 49-62, doi: [10.1016/0001-8791\(83\)90005-2](https://doi.org/10.1016/0001-8791(83)90005-2).

- 
- Hu, X., Kaplan, S., Wei, F. and Vega, R.P. (2014), "Do employees know how their supervisors view them? A study examining metaperceptions of career performance", *Human Performance*, Vol. 27 No. 5, pp. 435-457, doi: [10.1080/08959285.2014.956177](https://doi.org/10.1080/08959285.2014.956177).
- Jackson, B. and Beauchamp, M.R. (2010), "Self-efficacy as a metaperception within coach-athlete and athlete-athlete relationships", *Psychology of Sport and Exercise*, Vol. 11 No. 3, pp. 88-196, doi: [10.1016/j.psychsport.2009.12.005](https://doi.org/10.1016/j.psychsport.2009.12.005).
- Kahn, W.A. (1990), "Psychological conditions of personal engagement and disengagement at work", *Academy of Management Journal*, Vol. 33 No. 4, pp. 692-724, doi: [10.5465/256287](https://doi.org/10.5465/256287).
- Keller, B.K. and Whiston, S.C. (2008), "The role of parental influences on young adolescents' career development", *Journal of Career Assessment*, Vol. 16 No. 2, pp. 198-217, doi: [10.1177/1069072707313206](https://doi.org/10.1177/1069072707313206).
- Kenny, D.A. and DePaulo, B.M. (1993), "Do people know how others view them? An empirical and theoretical account", *Psychological Bulletin*, Vol. 114 No. 1, pp. 145-161, doi: [10.1037/0033-2909.114.1.145](https://doi.org/10.1037/0033-2909.114.1.145).
- Mattingly, T.J., Mullins, D., Melendez, D.R., Boyden, K. and Eddington, N.D. (2019), "A systematic review of entrepreneurship in pharmacy practice and education", *American Journal of Pharmaceutical Education*, Vol. 83 No. 3, pp. 273-280, doi: [10.5688/ajpe7233](https://doi.org/10.5688/ajpe7233).
- May, D.R., Gilson, R.L. and Harter, L.M. (2004), "The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work", *Journal of Occupational and Organizational Psychology*, Vol. 77 No. 1, pp. 11-37, doi: [10.1348/096317904322915892](https://doi.org/10.1348/096317904322915892).
- Metheny, J. and McWhirter, E.H. (2013), "Contributions of social status and family support to college students' career decision self-efficacy and outcome expectations", *Journal of Career Assessment*, Vol. 21 No. 3, pp. 378-394, doi: [10.1177/1069072712475164](https://doi.org/10.1177/1069072712475164).
- Papadimitriou, A. and Boboc, M. (2021), "Conclusion: re-imagining higher education institutions public mission initiatives through the lens of organizational perspective", in Papadimitriou, A. and Boboc, M. (Eds), *Re-envisioning Higher Education's Public Mission*, Palgrave Macmillan, Cham, pp. 275-290.
- Pellegrino, E.D. (1999), "The commodification of medical and health care: the moral consequences of a paradigm shift from a professional to a market ethic", *The Journal of Medicine and Philosophy*, Vol. 24 No. 3, pp. 243-266, doi: [10.1076/jmep.24.3.243.2523](https://doi.org/10.1076/jmep.24.3.243.2523).
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.-Y. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903, doi: [10.1037/0021-9010.88.5.879](https://doi.org/10.1037/0021-9010.88.5.879).
- Raatikainen, R. (1997), "Nursing care as a calling", *Journal of Advanced Nursing*, Vol. 25 No. 6, pp. 1111-1115, doi: [10.1046/j.1365-2648.1997.19970251111.x](https://doi.org/10.1046/j.1365-2648.1997.19970251111.x).
- Ramia, E., Salameh, P., Btaiche, I.F. and Saad, A.H. (2016), "Mapping and assessment of personal and professional development skills in a pharmacy curriculum", *BMC Medical Education*, Vol. 16 No. 1, pp. 1-13, doi: [10.1186/s12909-016-0533-4](https://doi.org/10.1186/s12909-016-0533-4).
- Rattan, A., Savani, K., Komarraju, M., Morrison, M.M., Boggs, C. and Ambady, N. (2018), "Meta-lay theories of scientific potential drive underrepresented students' sense of belonging to science, technology, engineering, and mathematics (STEM)", *Journal of Personality and Social Psychology*, Vol. 115 No. 1, pp. 54-75, doi: [10.1037/pspi0000130](https://doi.org/10.1037/pspi0000130).
- Sanitioso, R.B. and Wlodarski, R. (2004), "Search of information that confirms a desired self-perception: motivated processing of social feedback and choice of social interactions", *Personality and Social Psychology Bulletin*, Vol. 30 No. 4, pp. 412-422, doi: [10.1177/0146167203261882](https://doi.org/10.1177/0146167203261882).
- Shaw, H.K. and Degazon, C. (2008), "Integrating the core professional values of nursing: a profession, not just a career", *Journal of Cultural Diversity*, Vol. 15 No. 1, pp. 44-50.
- Shrauger, J.S. and Schoeneman, T.J. (1979), "Symbolic interactionist view of self-concept: through the looking glass darkly", *Psychological Bulletin*, Vol. 86 No. 3, pp. 549-573, doi: [10.1037/0033-2909.86.3.549](https://doi.org/10.1037/0033-2909.86.3.549).

- Ślebarska, K. and Flakus, M. (2021), "Career self-management of unemployed workers: the role of proactive coping in job-to-job transition", *Baltic Journal of Management*, Vol. 16 No. 1, pp. 135-153, doi: [10.1108/BJM-06-2020-0189](https://doi.org/10.1108/BJM-06-2020-0189).
- Stumpf, S.A. and Tymon, W.G. (2001), "Consultant or entrepreneur? Demystifying the 'war for talent'", *Career Development International*, Vol. 6 No. 1, pp. 48-56, doi: [10.1108/13620430110381034](https://doi.org/10.1108/13620430110381034).
- Taylor, K.M. and Betz, N.E. (1983), "Applications of self-efficacy theory to the understanding and treatment of career indecision", *Journal of Vocational Behavior*, Vol. 22 No. 1, pp. 63-81, doi: [10.1016/0001-8791\(83\)90006-4](https://doi.org/10.1016/0001-8791(83)90006-4).
- Thornton, P.H. and Ocasio, W. (2008), "Institutional logics", in Greenwood, R., Oliver, C., Sahlin, K. and Suddaby, R. (Eds), *The SAGE Handbook of Organizational Institutionalism*, SAGE, Thousand Oaks, CA, pp. 99-128.
- Timmermans, S. and Oh, H. (2010), "The continued social transformation of the medical profession", *Journal of Health & Social Behavior*, Vol. 51 No. 1, pp. S94-S106, doi: [10.1177/0022146510383500](https://doi.org/10.1177/0022146510383500).
- Tovar-Murray, D., Parries, M.M., Gutheil, J. and Carpenter, R. (2021), "Sociodemographics, beliefs, and attitudes as determinants of college students' career aspirations", *The Career Development Quarterly*, Vol. 69 No. 2, pp. 114-129, doi: [10.1002/cdq.12253](https://doi.org/10.1002/cdq.12253).
- Tsaousides, T. and Jome, L.R. (2008), "Perceived career compromise, affect and work-related satisfaction in college students", *Journal of Vocational Behavior*, Vol. 73 No. 2, pp. 185-194, doi: [10.1016/j.jvb.2008.04.003](https://doi.org/10.1016/j.jvb.2008.04.003).
- Vogel, R.M., Rodell, J.B. and Sabey, T.B. (2019), "Meaningfulness misfit: consequences of daily meaningful work needs-supplies incongruence for daily engagement", *Journal of Applied Psychology*, Vol. 105 No. 7, pp. 760-770. available at: <https://psycnet.apa.org/doi/10.1037/apl0000464>.
- Vuori, T., San, E. and Kira, M. (2012), "Meaningfulness-making at work", *Qualitative Research in Organizations and Management: An International Journal*, Vol. 7 No. 2, pp. 231-248, doi: [10.1108/17465641211253110](https://doi.org/10.1108/17465641211253110).
- Wolfe, M.T. and Patel, P.C. (2019), "Labor of love? The influence of work-conditions among self-employed and work stress", *Journal of Business Venturing Insights*, Vol. 11 e00118, doi: [10.1016/j.jbvi.2019.e00118](https://doi.org/10.1016/j.jbvi.2019.e00118).
- Zhang, C. and Hirschi, A. (2021), "Forget about the money? A latent profile analysis of calling and work motivation in Chinese employees", *Career Development International*, Vol. 26 No. 2, pp. 105-118, doi: [10.1108/CDI-12-2019-0294](https://doi.org/10.1108/CDI-12-2019-0294).
- Zhang, J., Yuen, M. and Chen, G. (2021), "Career-related parental support, vocational identity, and career adaptability: interrelationships and gender differences", *The Career Development Quarterly*, Vol. 69 No. 2, pp. 130-144, doi: [10.1002/cdq.12254](https://doi.org/10.1002/cdq.12254).

### Further reading

- Rosenthal, M.M., Breault, R.R., Austin, Z. and Tsuyuki, R.T. (2011), "Pharmacists' self-perception of their professional role: insights into community pharmacy culture", *Journal of the American Pharmacists Association*, Vol. 51 No. 3, pp. 363-367, doi: [10.1331/JAPhA.2011.10034](https://doi.org/10.1331/JAPhA.2011.10034).
- Yamada, Y., Klugar, M., Ivanova, K. and Oborna, I. (2014), "Psychological distress and academic self-perception among international medical students: the role of peer social support", *BMC Medical Education*, Vol. 14 No. 1, pp. 1-8, doi: [10.1186/s12909-014-0256-3](https://doi.org/10.1186/s12909-014-0256-3).

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