

# Individual and social variables and their effect on Case/Care Manager Job Satisfaction: an exploratory study

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**Abstract.** *Background and aims:* The Case/Care Manager (CCM) is a new position for in the Italian National Health Service scenario. Job satisfaction plays a key role for the CCM to engage in his work, accomplishing it in a complete. Nurses' job satisfaction is a complex construct and many different variables can influence it: personal characteristics, cultural characteristic, social characteristic, organizational characteristic, and environmental characteristic. The main aim of this study is to assess the job satisfaction in a sample of CCM and to assess if and how Social Variables (organizational climate and health) and Individual (socio-demographic variables, coping strategies, emotion regulation) relate to the CCM job satisfaction. *Methods:* This study has a quantitative exploratory cross-sectional design. Participants were Nurse CCM with or without specific training who filled a battery of questionnaires: Job Satisfaction Survey (JSS), section three of ICONAS questionnaire, section five of the Multidimensional Organizational Health Questionnaire (MOHQ), anamnestic sheet, Coping Orientation to the Problems Experienced (COPE-NVI-25), and Emotion Regulation Questionnaire (ERQ). The battery was administered online on the website of Italian Case Manager, Italian Association of Care Manager, and IP-ASVI Colleges. It was also distributed during the National Congress for Case Manager in Padua. *Results:* 103 participants took part in the study. The total mean score of JSS was 117,28 (S.D.=21,12). The emotional regulation strategy most used was the "Cognitive Response", and the most used Coping strategy was "Problem Oriented". There were significant correlations between JSS and Social variables in the total score (ICONAS  $r=.574$   $p<0.01$ ; MOHQ (positive indicators)  $r=.608$   $p<0.01$ ; MOHQ (negative indicators)  $r=-.634$   $p<0.01$ ) and in its subscales. There were also significant correlations between JSS subscales and Individual variables (COPE and ERQ). Participants with a specific training tend to use the emotion regulation strategy "Negative interpretation self-oriented" ( $U 910.500$   $p<0.005$ ) and "Distraction" ( $U 885.000$   $p<0.005$ ) more than those without specific training. The same significant difference was found in JSS pay ( $t=-2,48$  per  $p<0.05$ ) and JSS Fringe Benefits ( $t=-2,07$  per  $p<0.05$ ). *Discussion:* The CCM job satisfaction seems to be ambivalent. It seems to be not entirely polarized on presence/absence, but rather still in a gray area. organizational climate and health influence significantly the overall perception of job satisfaction and its different areas. The most "avoiding" emotional regulation strategies, seem to negatively affect the perception of satisfaction. Emotional regulation and coping strategies related to challenges focusing and management, along with the individual perception of collaboration, positively influence satisfaction. Participants who underwent a specific CCM training, committing themselves financially and personally, perceive less job satisfaction when their role is not recognized in terms of pay. This study showed that that the main strategies used to regulate emotions are the Cognitive Response and the Social Contact. We suggest that further studies could be made to define the links between individual strategies and the presence of chronic distress and we suggest that a specific training on coping and emotion regulation may be implemented in graduation and post-graduation courses

**Key words:** Case/Care Manager, nursing, job satisfaction, coping strategies, organizational well-being, emotion regulation

## Introduction

The Case/Care Manager (CCM) is a new position for in the Italian National Health Service scenario. The University of Parma, stands out from the national context integrating two realities already existing in the territory: the Case Managers and Care Managers.

The new nursing figure is the Case Care Manager, set in a multidisciplinary environment, since the collaboration with various professionals is essential to guarantee both the quality of care and the cost containment.

As for each health professional, job satisfaction plays a key role for the CCM to engage in his work, achieving business goals, and accomplishing in a complete, professional, and human way his work. The quality of health services is directly related to health professionals' job satisfaction (1-3).

Nurses' job satisfaction is a complex and multidimensional construct and many different variables can influence it: personal characteristics (e.g. age, gender, education level), cultural characteristic (e.g. beliefs and values), social characteristic (e.g. group dynamics, formal and informal relationship), organizational characteristic (e.g. staff policies, structure of the organization, technology, management systems) and environmental characteristic (e.g. social and welfare facilities) (4, 5).

Within the social characteristics, the team functioning is closely related to the perception of nurses' job satisfaction. For health professionals, the social organization of the team, the ability to promote and maintain workers' physical and mental wellbeing, increases the sense of belonging and satisfaction (6). A cohesive team not only works the best, but it also improves patient's feeling of safety, satisfaction and his clinical outcome (7).

The relationship both with patients and co-workers and the emerging emotional involvement are also related to the nurses' work wellbeing. Hostile interpersonal relationships and the perception of excessive demands can increase job dissatisfaction in nurses (8). For CCM feeling recognized in their role to colleagues, superiors, and patients increases professional achievement, but, as shown in a previous research, this aspect is still a critical point (9).

Another relevant aspect in nurses' job satisfaction is time, both as time devoted to the patient and as time

devoted to private life. The management of workloads, pressures related to the services timing, searching for synchronization in planned interventions per the adequacy criteria, can influence the job satisfaction (10).

We should not underestimate the need to find a balance between work and private life, along with the desire to improve that relationship. Knowing how to best balance the time for work and private life and knowing how to adequately manage the time in the delivery of health services to the other, positively influences job satisfaction of professionals involved in the care process (11).

Commitment, motivation, clinical and organizational skills, flexibility in working hours are qualities essential to the CCM and these aspects should be acknowledged through the professional (12) and economic rewards (13).

Moreover, many studies highlighted that the presence of feelings of dissatisfaction related to different aspects of the work (e. g. activities, workload, career opportunities, autonomy, learning opportunities, fairness of evaluation system, economic rewards, benefits, professional status) bind to the intention to leave their profession (14).

Work climate is intended as the way people perceive the work environment and includes both external and internal factors such as attitudes, feelings, and behaviors. A good work climate encourages openness, trust, confidence, commitment, resulting in increased motivation (15). The work climate seems to be a valid predictor of professional commitment and orientation to the work values (12), thus fostering job satisfaction.

Moving to individual's characteristics that affect nurses' job satisfaction we found in literature the professional education. Continuing professional education is a core concept of the Code of Ethics and investing in the post-basic education of the staff has importance, not only in improving patient care, but also in increasing the job satisfaction of health professionals (16). Socio-demographic variables are frequently investigated within any questionnaire that evaluates nurses' job satisfaction. but there is not a univocal indication of the effect of these variables on job satisfaction. The age and education, according to some studies, is inversely related to job satisfaction (17), while according to other studies is directly proportional (18)

In this environment become important also the individual coping strategies, as a “ set of cognitive and behavioural efforts made to control specific internal and/or external requests, which are valued by the subject as excessive in relation to the resources of the person” (19). Coping refers to a set of mental and behavioural strategies implemented to address the stressful situation, coming from the interaction between the individual and the situation (20). Coping strategies are classically divided in problem-focused, emotion-focused and avoidance (21). From the nurses’ point of view problem-focused coping seems to be an essential resource, since it promotes greater efficiency in carrying out tasks, a higher job satisfaction and increases the level of individual well-being (22, 23).

Also, emotion regulation seems to be an individual characteristic influencing job satisfaction. Some researchers stated that organisation members may perform effectively because they have high emotional intelligence (24). This construct is made of different dimensions, including the “regulation of emotions in the self”, which is the fundamental ability to regulate emotions enabling a more rapid recovery from psychological distress (25, 26)

To summarize, in literature are described individual and workplace organizational characteristics which seem to deeply affect nurses’ job satisfaction. Then it seems necessary to investigate whether these characteristics play the same role also in CCM job satisfaction.

## Aims

According to these premises the main aim of this research project is to assess the job satisfaction in a sample of CCM.

Secondary the study assesses if and how Social Variables (organizational climate and health) and the Individual (socio-demographic variables, coping strategies, emotion regulation) and are related to the CCM job satisfaction.

## Method

### *Design*

This study is a quantitative exploratory research with a cross-sectional design.

### *Participants*

The participants were recruited with a non-probability and convenience sampling

The inclusion criteria were:

- Nurses Case/ Care Managers with a specific training;
- Nurses Case Managers with a specific training;
- Nurses performing the function of Care Case Manager without a specific training;
- Nurses performing the function of Case Manager without a specific training.

The exclusion criteria were:

- Case Manager not nurses
- Pediatric Case Managers

The authors decided to exclude CM not nurses because the chosen variables in literature were set in the specific field of nurses. Pediatric CM were excluded because the pediatric workplace environment set specific challenges that can influence the job satisfaction

### *Instruments*

Each participant filled a battery of questionnaires (previously validated for Italian population) composed by:

- Job satisfaction, measured by Job Satisfaction Survey (JSS) (27; 28). This questionnaire is composed of 36 items (e.g. “I feel I am being paid a fair amount for the work I do”) that investigate nine areas of job satisfaction: pay, promotion, supervision, fringe benefit, contingent rewards, operating conditions, co-workers, nature of work, communication, along with a total satisfaction score. Answers are on a six-points Likert scale.
- To evaluate the satisfaction about the balance work/private life, which is not measured as a construct in the JSS was added the question, caught from the McCloskey Muller Satisfaction Scale (29): “how satisfied are you about each of the following aspects: Working hours; Working time flexibility; Possibility of day working; Part-time opportunity; Flexibility on weekend planning”. The answers are measured on a six-

points Likert scale, and we intended them as a single construct.

- Organizational climate measured by the section three of ICONAS questionnaire (30). This section is composed by 16 items (e.g. “In your Unit roles are clearly defined and tasks are properly divided according to the different professional specialties?”) with answers measured on a ten-points Likert scale, Three items with answers “yes”, “no” and “partly” and two open questions of general evaluation of the organizational climate. ICONAS has been already used and validated by the AUSL of Rimini already within a Regional Health Agency Project;
- Organizational health measured by the Section five of the Multidimensional Organizational Health Questionnaire (MOHQ; 31). This section lists 12 positive indicators (being part of a team, satisfaction with relationships, confidence in the leadership skill) and 13 negative indicators (work dissatisfaction, aggression, and stress, lack of initiative) of organizational health with answers on a four-point Likert scale;
- To collect socio-demographic variables, an anamnestic sheet, collecting the following information:
  - Sex (male/female)
  - Birth year
  - Level of education (University CCM post-graduation training; different CCM training; no specific CCM training)
  - Years of practice (1 to 5; 6 to 10; 21 to 30; more than 30)
  - Role currently held (nurse, nurse CCM, nurse Case Manager)
- Prevalent coping strategies measured by Coping Orientation to the Problems Experienced COPE-NVI-25 (32). This questionnaire is composed of 25 items (e.g. “I try to get advice from someone about what to do”) that investigate five coping strategies: orientation to the problem, positive attitude, transcendental approach, social support and avoidant strategies. The Answers are measured on a six-points Likert scale.
- Emotion regulation strategies measured by Emotion Regulation Questionnaire (33). This

questionnaire is composed of 21 items (e.g. “I talk to someone about how I feel”) that measure the ability in regulating emotions. Answers are on a five-points Likert scale.

#### *Procedure and ethical consideration*

To assess addressed variables, we administered the battery online through Google Drive. The link was published on the website of Italian Case Manager, of the Italian Association of Care Manager, and of IP-ASVI Colleges. In addition, the questionnaire was distributed during the National Congress for Case Manager in Padua. The research team paid attention to the protection of participants’ sensitive data as defined by national law (D.Lgs 196/2003). This study received the Ethic approval from the Institutional Review Board of the University of Parma.

#### **Data analysis**

Data were analyzed using Microsoft Excel and SPSS 20. For each variable, we evaluated descriptive statistics (M; SD.). Moreover, we computed significant correlations between individual and social variables and Job Satisfaction using Pearson’s and Spearman’s Correlational test. To assess eventual differences within the group basing on the presence or absence of a specific training for CCM position, we used Mann-Whitney and Student T test. We also classified the more used emotion regulation and coping strategies using ZPoints.

#### **Results**

##### *Descriptive Analysis*

103 participants took part in the study. They were 79,6 % female and 20,4% male; the mean age was 45,51 years (SD= 7,52). The 42,7% of the sample had a post-graduation training for CCM position, 31,1% had not specific training and 26,2% had a training different from post-graduation.

The sample was quite heterogeneous basing on years of service and years as a CCM.

**Table 1.** ERQ raw score converted in ZPoints

	Mean	St. Dev.		
ERQ Social contact	10,146	3,1974	punti z	0,774461
ERQ Cognitive Response	12,408	2,8160	punti z	0,985071
ERQ Neg. Interpr. Self-oriented	4,553	1,3264	puntiz	0,002955
ERQ Neg. Int. Others oriented	5,796	1,2236	puntiz	0,024218
ERQ Distraction	11,816	2,9230	punti z	0,964121

**Table 2.** COPE raw score converted in ZPoints

	Mean	St. Dev.		
COPE Avoidance	16,505	3,6726	punti z	0,579641
COPE Transcendent Or.	16,214	3,8211	punti z	0,070264
COPE Positive Attitude	16,379	5,8730	punti z	0,299871
COPE Social Support	16,136	3,5811	punti z	0,027401
COPE Problem Orientation	17,117	4,5424	punti z	0,9999

The total mean score of JSS was 117,28 (SD=21,12).

The most used strategies of emotion regulation and coping in this sample were distributed as in Tab. 1 and 2.

#### *Significant correlation between JSS and Social variables*

Data showed the following significant correlations;

JSS total score

- MMss  $r=.263$   $p<0.01$
- ICONAS  $r=.574$   $p<0.01$
- MOHQ (positive indicators)  $r=.608$   $p<0.01$
- MOHQ (negative indicators)  $r=-.634$   $p<0.01$

Promotion

- MOHQ (Positive Indicators)  $r=.250$   $p<0,05$

Supervision

- ICONAS  $r=.574$   $p<0,01$ .
- MOHQ (Positive Indicators)  $r=.482$   $p<0,01$
- MOHQ (Negative Indicators)  $r=-.495$   $p<0,01$
- MMss  $r=.201$   $p < 0,05$

Fringe Benefits

- MOHQ (Positive Indicators)  $r=.284$   $p<0,01$
- MOHQ (Negative Indicators)  $r=-.281$   $p<0,01$

Contingent Rewards

- ICONAS  $r=.375$   $p<0.01$
- MOHQ (Positive Indicators)  $r=.488$   $p<0.01$
- MOHQ (Negative Indicators)  $r=-.469$   $p<0.01$

Operating Procedures

- ICONAS  $r=.234$   $p<0.05$
- MOHQ (Positive Indicators)  $r=.283$   $p<0.01$
- MOHQ (Negative Indicators)  $r=-.294$   $p<0.01$

Coworkers

- ICONAS  $r=.524$   $p<0.01$
- MOHQ (Positive indicators)  $r=.462$   $p<0.01$
- MOHQ (Negative Indicators)  $r=-.422$   $p<0.01$

Nature of work

- ICONAS  $r=.415$   $p<0.01$
- MOHQ (Positive indicators)  $r=.376$   $p< 0.01$
- MOHQ (Negative indicators)  $r=-.521$   $p<0.01$
- MMss.  $r=.204$   $p<0.01$

Communication

- ICONAS  $r=.515$   $p<0.01$ .
- MOHQ (Positive indicators)  $r=.456$   $p< 0.01$
- MOHQ (Negative indicators)  $r=-.590$   $p<0.01$
- MMss.  $r=.211$   $p< 0.01$

#### *Significant correlations between JSS and Individual variables*

Data showed the following significant correlations:

Pay

- ERQ (Social Contact)  $r=-.204$   $p<0.05$
- ERQ (Distraction)  $r=-.264$   $p<0.01$ . Supervision

- COPE-NVI-25 (Transcendent Orientation)  $r_s = .209$  per  $p < 0.05$

#### Fringe Benefits

- ERQ (Social Contact)  $r_s = -.262$  per  $p < 0,01$
- ERQ (Distraction)  $r_s = -.277$  per  $p < 0,01$

#### Contingent Rewards

- ERQ (Distraction)  $r_s = -.208$  per  $p < 0.05$

#### Coworkers

- COPE-NVI-25 (Transcendent Orientation)  $r_s = .207$  per  $p < 0.05$
- COPE-NVI-25 (Problem Orientation)  $r_s = .216$  per  $p < 0.05$ .

#### Nature of Work

- ERQ (Negative interpretation self-oriented)  $r_s = -.285$  per  $p < 0.01$
- COPE-NVI-25 (Transcendent Orientation)  $r_s = .290$  per  $p < 0.01$ .
- COPE-NVI-25 (Problems Orientation)  $r_s = .196$  per  $p < 0.05$

#### *Differences within group basing on presence/absence of specific training*

Data showed that participants with a specific training tend to use the emotion regulation strategy “Negative interpretation self-oriented” more than those without specific training ( $U = 910.500$   $p < 0.005$ ).

This was true also for the strategy “Distraction” ( $U = 885.000$   $p < 0.005$ ).

Moreover, using Student’s T-test we found a significant difference in JSS pay ( $t = -2,48$  per  $p < 0.05$ ) and JSS Fringe Benefits ( $t = -2,07$  per  $p < 0.05$ ). Participants with a specific training for CCM were significantly dissatisfied towards pay and benefits compared to participants without a specific training.

## Discussion

From the analysis of collected data, the Nurse CCM job satisfaction seems to be ambivalent, confirming what emerged in previous research (9). Based on Spector’s proposed interpretation (34), satisfaction seems to be not entirely polarized on presence/ab-

sence, but rather still in a gray area. This may be due to the novelty of this position within health services and the process of adjustment still in place.

Data confirm how social variables (organizational climate and health) influence significantly the overall perception of job satisfaction and also the different areas which it consists (1, 6, 7, 12).

However, interesting observations emerge from the analysis of Individual variables.

It emerges clearly how emotional and coping regulation strategies affect the perception of satisfaction. This finding is in line with the existing literature on work types that require constant contact with the public and hence the importance of specific relational skills (35, 36).

In this sample, the most “avoiding” emotional regulation strategies, which are linked to less conscious and emotional management, seem to negatively affect the perception of satisfaction.

Data showed that emotional regulation and coping strategies that are more constructive and related to challenges focusing and management (as problem solving strategy), along with the individual perception of collaboration as social support and transcendence, positively influence satisfaction. This happens in particular in those areas related to collaboration with coworkers and the nature of work, here meant as “the job tasks themselves” (34).

A specific comment should be made about the relation between JSS “Fringe Benefits” and some emotional regulation strategies (Social Contact and Distraction). According to the data, as the use of these emotional regulation strategies increases, there is a decrease in perceived satisfaction with fringe benefits. However, defining benefits as “a non-cash award” makes it difficult to interpret this specific correlation. We hypothesize that in this sample, the term benefit has been interpreted ambiguously or as an incentive, which is generally allocated in relation to the role rather than individual performance or as the possibility of shift variations, rest, holidays, which in fact are not benefits.

The same about the significant correlation emerging between the emotion regulation strategy “Distraction” and the JSS scale “Contingent Reward”.

The emotional regulation strategy most used by the participants was the “Cognitive Response”, while

the most commonly used Coping strategy was the one “Problem Oriented” that allows facing directly a challenge through one’s own resources. These data confirm that coping strategy problem-oriented is associated with a higher job satisfaction, that previous research also linked to better health for the operator (22, 23). Analyzing the differences within the group, we found that participants with a specific CCM training perceive a significantly lower satisfaction towards salary and fringe benefits than the group that did not receive any training. Additionally, participants with specific training seem to use emotional regulation strategies based on “Distraction” and “Negative Interpretation towards Others” more frequently than the others. We hypothesize that this may be due to the decreased satisfaction with some work areas, and could be seen as a possible precursor of a condition of chronic distress as shown in literature (11). We suppose that participants who underwent a specific CCM training, by committing themselves financially and personally, perceive less job satisfaction when their role is not recognized in terms of pay (13).

In the Italian context, in particular, it is also common to find people without a specific CCM training, however working in this position for equal pay. This one may be a cause for dissatisfaction since people could not perceive the recognition for the path they chose to take.

## Conclusions

Although the limitations of this study, as the plenty of social and individual variables that were hypothesized to influence job satisfaction and the number of participants relatively small, these results can give come important input for future studies.

The comments on the interpretation given by participants to “Fringe Benefit” and “Contingent Rewards” point to the possibility of carrying out a qualitative or quail-quantitative study to clarify in Italian culture what is considered as a benefit and a contingent reward, also in order to improve the potentiality of the JSS scale.

This study showed that that the main strategies used by Italian CCM to regulate emotions are the Cognitive Response and the Social Contact. These are legitimate if associated with other responses and used

only in certain situations, but when used as the only way to respond to emotions they could be not effective. We suggest that further studies could be made to define the links between these individual strategies and the presence of chronic distress in CCM. This could help identifying specific individual demands, making it possible to create answers helpful for the CCM. In fact, we suggest that a specific training on coping and emotion regulation may be implemented in graduation and post-graduation courses. This would help health-care providers learn how to use properly coping and emotional regulation strategies in order to manage critical working conditions.

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