Self-perception of PsyCap in Higher Education Program Coordinators

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Summary

This study analyzes the self-perception of higher education program coordinators working on private and community higher education institutions in Southern Brazil about their Psychological Capital (PsyCap), and their perceived ability to generate PsyCap in faculty members with whom they work. The study is based on four dimensions to assess PsyCap: Optimism, Self-Efficacy, Hope and Resilience (Luthans, Youssef, & Avolio, 2007; Luthans, Youssef-Morgan, & Avolio, 2015), and some references on University Management, focusing on the role of program coordinators (Argenta, 2011; Colombo, 2011, 2013; Demo, 2005; Ferreira, 2009; Franco, 2013; Marcon, 2008). The research design is mixed, with data gathered by an electronic survey based on the Psychological Capital Questionnaire (PCQ24) instrument (N = 309), followed by semi-structured interviews with 10 program coordinators. Data analyses indicate a considerable amount of operational activities assigned to program coordinators, which interferes in their capacity of fully manage the programs they coordinate. Average level of Self-Efficacy was higher in men, and average level of Optimism was higher in women. The years of working experience at University was significant to self-perceived PsyCap levels, and coordinators who have between 5 and 10 years of working experience in higher education institutions presented the higher average of self-perceived PsyCap in the sample.

Keywords: psychological capital; PsyCap; program coordinator; university management

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O Coordenador de Curso Superior e a Autopercepção do PsyCap

Resumo

Este estudo objetivou analisar a autopercepção de coordenadores de curso superior de IES privadas e comunitárias do RS/Brasil sobre o seu Capital Psicológico (PsyCap) e a sua capacidade de gerá-lo nos professores com os quais trabalham. O estudo é baseado em quatro dimensões para analisar o PsyCap: Otimismo, Autoeficácia, Esperança e Resiliência (Luthans, Youssef, & Avolio, 2007; Luthans, Youssef-Morgan, & Avolio, 2015) e em referências sobre Gestão Universitária (Argenta, 2011; Colombo, 2011, 2013; Demo, 2005; Ferreira, 2009; Franco, 2013; Marcon, 2008). O estudo é quanti-qualitativo e os dados foram recolhidos por meio eletrónico com o instrumento Psychological Capital Questionnaire (PCQ24) (N=309), seguida de entrevistas semiestruturadas a 10 coordenadores. A análise dos dados indica que ao coordenador são atribuídas várias atividades operacionais, o que interfere na sua capacidade de gerir plenamente o curso que coordena. Observou-se uma média mais alta de Autoeficácia nos homens, e Otimismo nas mulheres. O tempo de atuação no meio universitário foi significativo para o nível de PsyCap percebido, apontando que os coordenadores com 5 a 10 anos de atuação em IES apresentam as maiores médias no PsyCap.

Palavras-chave: capital psicológico; PsyCap; coordenador de curso; gestão universitária

INTRODUCTION

The Brazilian National System of Higher Education (BNSHE) Assessment Program is based on three axes to evaluate quality in higher education: institutions, programs and student performance. It considers management as one of the aspects to be assessed, along with faculty qualifications, facilities, students' achievements, among others. Higher education program coordinators (HPCs) are members who act as managers of undergraduate programs, interacting with deans, other faculty members, administrators and students, to maintain or improve quality and operational conditions of the program, thus being directly related to the evaluation axes of the BNSHE Assessment Program. According to the Brazilian Ministry of Education, it is the role of HPCs to motivate and to retain the engagement of other faculty members. Making them key players in the academic scene (Cabeço & Requena, 2011; Ferreira, 2009; Marcon, 2008; Marquesin, Penteado, & Batista, 2008).

The position of HPC was created after changes proposed by the Brazilian Law 9.394 / 96, which abolished education departments in universities, allowing private or non-profitable Higher Education Institutions (HEIs) to reorganize and centralize both academic and administrative duties in one organizational role. On the one hand, this change rationalized costs, by merging roles and responsibilities of both head of the department and pedagogical coordinator. On the other hand, it increased relational complexity to program's management, due to the increased complexity of the main duties, responsibilities and challenges HPCs take as managers. Usually, in the context under analysis, these actors remain as faculty members while being HPCs, thus sustaining the same hierarchical level of those they manage in the academic structure. Besides that, they are expected to seek for better results while maintaining a motivational and positive reinforcement environment.

Considering this context, we analyzed the self-perception of HPCs of private and community HEIs in the Rio Grande do Sul state, Brazil, about their Psychological Capital (PsyCap), and their ability to generate it in faculty members with whom they work.

The concept of PsyCap was developed in the beginning of the XXI century and is understood as the application of positive psychological capacities that can be stimulated, developed, and managed to improve the work performance (Luthans et al., 2007, 2015). Only recently this topic of research has been developed in Brazil and empirical studies are still rare. Nevertheless, there is a significant amount of research addressing this subject, especially in the US, most of them linking PsyCap and leadership (Avey, Richmond, & Nixon, 2012; Clapp-Smith, Vogelgesang, & Avey, 2009; Luthans, Youssef, Sweetman, & Harms, 2013; Wang, Sui, Luthans, Wang, & Wu, 2014). Based on that, the motivation for this study is twofold: to enhance empirical research on PsyCap in Brazil and to understand how PsyCap is related to the performance of attributions of HPCs, relating this concept to university management.

HEIs MANAGEMENT: THE HPC ROLE

For a long time, the focus of academic management was restricted to bureaucratic issues related to legislation, especially the pedagogical training of faculty members and monitoring of the institution's routines (Ferreira, 2009; Sousa, 2011). This scenario has been changing, and university administrators are nowadays demanded to not only have a systemic view of the organization (Ferreira, 2009), but also, due to the highly competitive market in Brazilian higher education, to take on new challenges, such as: to do creative planning, to align programs to the needs of the labor market, to create programs that envisage both student learning

and university's retention rate, etc. According to Sousa (2011), this challenge is related to change paradigms and to promote changes in the HEIs administrative culture. Meanwhile, Colombo, Ivoglo, and Goldchleger (2013) indicate the complexity of HEI's organizational structures as one driver for resistance to change. Thus, a relevant issue for HEIs' strategy is defining the format and the scope of action for academic managers. According to Sousa (2011), academic managers must be able to inspire both faculty members and students, encouraging creativity and generating confidence.

Also, Colombo et al. (2013) point out that there is a contradiction in educational organizations – even if they spread the importance of knowledge in management, virtually nothing is put into practice in their own structure. The same authors consider people as essential for an organization to be competitive, and indicate that, when it comes to HEIs, there is a lack of strategy focused on people management, with little or no investment on the development of managers or employees. Nevertheless, since the Brazilian Law 9.394/96, the position of HPC embraces, among other duties, responsibility for both economic and educational success of higher education programs in HEIs (Franco, 2013; Silva, 2007). The program coordinator manages the entire program, getting involved with aspects that range from infrastructure to sustainability, no longer being an operating agent but a manager with the ultimate goal of maintaining the effectiveness of the program he or she manages (Ferreira, 2009; Kanan & Zanelli, 2011).

For Silva (2007), HPCs must be leaders with sufficient capacity to promote changes and encourage people in the organization, being facilitators to the program objectives as well as to faculty members and students. The same author divides the coordinator's assignments into three categories: academic management; program management; and political management. In addition, a proactive – as opposed to a reactive, bureaucratic – profile is considered fundamental to one assuming this position. Such profile consists of tangible and intangible assets and deliveries. Ferreira (2009) and Marquesin et al. (2008) understand HPCs as transforming agents of the academic reality.

Thus, the role of a coordinator goes beyond the development and implementation of the program's politic-pedagogical project. It embraces both a professional and a personal action on the current needs of the program, while meeting the requirements of the Brazilian Ministry of Education and the BNSHE Assessment Program. This leads to constant evaluation of infrastructure, faculty members' and students' conditions and engagement with the mission and values of the HEI he or she serves. So, the HPC becomes one of the main agents of change concerning improvement on education management (Cabeço & Requena, 2011; Ferreira, 2009). However, the development of this perspective of leadership in each HPC does not occur instantly, neither

devoid of complexity. To develop leadership, HPCs need to be, at first, individuals who have skills and knowledge relevant to this exercise (Cabeço & Requena, 2011).

Another key requirement is that the HEIs promote the development of leadership competencies in HPCs to adequately exploit these professional capacities in their daily routines. However, many previous studies shown that HEIs do not invest in this kind of development, perhaps due to their lack of perception of the exercise of leadership as part of the everyday life of these professionals (Burigo & Laureano, 2013; Cres, 2011; Gomes, Gomide, Gomes, Araujo, Martins, & Faroni, 2013; Justen, Tronco, & Copetti, 2014; Kanan & Zanelli, 2011; Santos & Bronnemann, 2013).

Even though having previous experience in leadership positions is ideal for a HPC, this is not always possible. So, many HPCs end up developing their capacities related to management and leadership through successes and errors (Cabeço & Requena, 2011; Camargos, Ferreira, & Camargos, 2010; Cres, 2011), a practice that goes against one of the main characteristics of the HEIs: to produce and to socialize knowledge and best practices, through change, innovation and discussion of ideas.

University management is a broad theme and one of its aspects is HPCs' roles and capacities. We propose that discussing PsyCap of HPCs can provide an adequate approach to better understand the role of HPCs in University's management.

PSYCHOLOGICAL CAPITAL (PSYCAP)

At the beginning of the XXI century, the first studies on PsyCap were published. It was a result of the Positive Psychology movement, of the Positive Organizational Behavior and of the Positive Organizational Studies, the latter two having been developed within the field of Organizational Behavior (Luthans et al., 2015). PsyCap is understood as the application of positive psychological capacities that can be stimulated, developed, and managed to improve the work performance (Luthans, 2002; Luthans et al., 2015; Toor & Ofori, 2010).

PsyCap is a positive psychological state of development which is characterized by four dimensions: a) Self-Efficacy: to have confidence to face challenges as far as employing effort to complete them; b) Optimism: to have a positive outlook about succeeding now and in the future; c) Hope: to persevere in the pursuit of goals and, when necessary, to redirect the ways of achieving them, seeking success; d) Resilience: facing adversities and problems, to resist and to have the ability to overcome them and to go beyond. (Luthans et al., 2007, 2015). The psychological dimensions of PsyCap, especially on efficacy, have appeared previously, to some degree, in the literature on organizational behavior studies.

PsyCap is also characterized as (Avey, 2014): a) not an isolated psychological dimension, but a multidimensional construct composed of four dimensions (Resilience, Hope, Optimism and Self-Efficacy); b) specific to an organizational domain: to accomplish positive PsyCap outcomes does not guarantee the same results in other contexts, e.g., in the home environment; c) more stable than emotions, but more open to change than personality traits: a 'state' that can be developed; d) an individual state of development weakly affected by the opinion of others; e) measurable, by scales such as the PQC24; f) a predictor of performance at work; and g) of individual domain, regarding its analysis.

The concept of PsyCap has been analyzed, theoretically and empirically, by measuring performance and satisfaction of workers in various companies (Avey, Luthans, & Youssef, 2010; Luthans & Avolio, 2009). A longitudinal study developed by Avey, Wernsing, and Mhatre (2011) emphasized the development of PsyCap, in theory and in practice, as feasible. Recent research also points to the positive relationship between PsyCap and prosperity at work, founding evidence that good organizational environment promoted by the leader and oriented by PsyCap, may result in development of the worker (Paterson, Luthans, & Jeung, 2014).

Studies on PsyCap have expanded beyond the organizational domain. Research shows positive correlation between high levels of PsyCap and individuals welfare in a personal and social perspective (Luthans et al., 2013).

METHOD

This is a cross-sectional and exploratory research, with a mix design. Data was collected between July and August 2014, resulting from the application of PCQ24 and the inventory of critical incidents.

Research objectives

The main objectives of this research were: a) to analyze the self-perception of HPCs of private and community HEIs of the State of Rio Grande do Sul, Brazil, about their PsyCap, as well as their ability to generate it in faculty members and students with whom they work; b) to identify the main professional duties of HPCs; c) to verify if the participants' PsyCap is influenced by gender, their experience as coordinator, or their overall experience in universities.

Sample and Subjects of Interest

For quantitative analysis, the sample was composed by 309 HPCs of private and community HEIs located in the Rio Grande do Sul state, southern Brazil. The sample size followed the guidance of 10 respondents per item, to sustain factor analysis at 5% significance level (Hair, Babin, Money, Samoel, 2005). Regarding the characteristics of the sample (Table 1), 162 (52.4%) respondents were women, and 147 (47.6%) were men, not being found significant differences in this proportion (p = .393); 71% of the participants were of age up to 50 years; professional years' experience presented higher concentrations in the ranges between 10 to 15 and 21+ years (p < .001); experience as HPCs in their current institutions presented higher concentration in the range between 1 to 5 years (53.7%), followed by 6+ years (29.7%) (p < .001).

Table 1
Socio-demographic data of respondents

Age	N	%
up to 40 years	110	36%
41 to 50 years	109	35%
51+ years	90	29%
Experience in Universities	N	%
up to 5 years	44	14%
5 to 10 years	59	19%
10 to 15 years	75	24%
15 to 20 years	60	19%
21+ years	71	23%
Experience as HPC	N	%
up to 1 year	51	16.50%
1 to 5 years	166	53.70%
6+ years	92	2970%

Source: research data (2014)

For the qualitative analysis, 10 subjects currently in the role of HPC were randomly selected among the 309 respondents and interviewed. As descriptive indicators (Table 2): interviewees' ages range from 27 to 55 years old (M=44.7, SD=8.5); they were occupying the role of HPC in their current organizations from 2 to 17 years (M =5.3, SD=4.8); professional years' experience in universities ranged from 4 to 27 years (M =13.8, SD=7.3); four subjects were female, and six, male; and seven had previous experience in leadership positions.

Table 2
Socio-demographic data of interviewees

Identification	Gender	Age	Experience as HPC	Experience in Universities	Previous experience in leadership
Interviewee 1	F	42 years	2 years	14 years 6 months	YES
Interviewee 2	M	55 years	3 year 6 months	7 years	YES
Interviewee 3	F	27 years	1 year 2 months	4 years	NO
Interviewee 4	M	52 years	3 years	15 years	YES
Interviewee 5	F	43 years	3 years	10 years	YES
Interviewee 6	M	51 years	11 years	27 years	YES
Interviewee 7	F	52 years	2 years 6 months	17 years	YES
Interviewee 8	M	34 years	3 years	4 years	YES
Interviewee 9	M	42 years	7 years	16 years	NO
Interviewee 10	M	49 years	17 years	23 years	NO

Source: research data (2014)

Measurement Instruments

The PCQ24 questionnaire, developed by Luthans et al. (2007) was applied through electronic survey, using the Survey Monkey platform. The instrument was adapted to Brazilian Portuguese and terms were changed to adhere to the reality of the research subjects, and the authorization of use for the questionnaire was obtained from *mindgarden.com*. Regarding the scale PCQ24, each of the four PsyCap dimensions was measured by a set of six questions through a six-point Likert scale, ranging from *strongly disagree* (1) to *strongly agree* (6).

For qualitative data collection, semi-structured interviews divided into two parts were conducted. The categories used in the research emerged from the study objectives and the theoretical references adopted. Firstly, four open questions on the interviewees' perceptions about their role of HPC were presented: the main assignments of HPCs; duties which require more time and dedication; the interviewee's perception about being in a leadership position; and contributing and difficulty factors in the exercise of leadership by an HPC. Secondly, an inventory of critical incidents was solicited through narratives, aiming to analyze the interviewees' perception about their ability to generate the four dimensions of the PsyCap in faculty members, other coordinators and/or students. The critical incident technique is characterized as the description, by the research subject, of

his/her own behavior in certain situations (Kremer, 1980). During the incident recall, a brief explanation of each of the four PsyCap dimensions were presented to the interviewees to stimulate them to present illustrating situations where they understood they had generated such dimensions in faculty members or students.

Data analysis procedures

Quantitative analysis was performed in IBM SPSS 22 statistics software (Table 3). Initially, Cronbach's alpha was estimated for evaluating internal consistency (α = .752), i.e., "that respondents answered to questions coherently". (Hair et al., 2005, p. 200). Then the Kaiser-Meyer-Olkin test (KMO = .725) and the Bartlett's sphericity test ($p < .001$) were performed, obtaining indication of suitability for Factor Analysis. Unique factor extraction per construct (Harmann, 1967) was performed to test minimum ability for scale validity. Two dimensions of PsyCap – Optimism and Resilience – had total extracted variance below the minimum of 50%, hence not being recommended to be validated. This finding lead to reviewing the scale, resulting in removal of items 13 and 15 from the dimension Resilience, and of items 19 and 24 from the dimension Optimism, due to excessive noise. After removing these items, the analysis resulted in acceptable values for scale validity, as presented ahead in Table 3.

Table 3
Results

Dimensions	Average	Cronbach´s alpha	KMO	Sig. Teste Bartlett	Total variance explained	Gender M/F	Age (*p*)	Experience in Universities	Experience as HPC
Self-Efficacy (1 to 6)	5.1499	.851	.85	< .001	57.69%	167.48/143,68 **(sig .019)**	.762	.444	.768
Hope (7 to 12)	5.1343	.798	.811	< .001	50,16%	151.20/158.45 (sig .474)	.737	.154	.935
Resilience (13 to 18)	4.8258	.654	.743	< .001	37.72%	153.66/156.22 (sig .801)	.249	**.045**	.534
Resilience (without QUE13R, QUE15)	4.8641	.662	.700	< .001	49.95%	142.07/166.73 **(sig 0.15)**	.599	**.009**	.337

Optimism (19 to 24)	4.5976	.600	.662	< .001	35.61%	142.1/166.71 **(sig .015)**	.241	**.007**	.460
Optimism (without QUE19, QUE24)	4.8584	.658	.631	< .001	49.61%	153.30/156.54 (sig 0.748)	**.017**	**.007**	.481
General	-	.752	-	-	-	-	-	-	-

Source: research data (2014)

Given the results from this preliminary analysis, three courses of action emerged and were followed:

a) even with low total extracted variance in dimensions Optimism and Resilience, to analyze the scale in its original form, allowing comparison with other studies on Psychological Capital in several countries (Luthans et al., 2015). Although most researches validating the instrument have been carried out in different contexts, they were typically held in the US. Additionally, Dawkins, Martin, Scott, and Sanderson (2013), analyzing 29 studies using the PCQ24, identified significant differences in the extracted variance loads of the PsyCap factors;

b) to perform the analysis disregarding items 13, 15, 19 and 24, respecting the validity criteria, as indicated in Table 3, to produce a better understanding of quantitative evidence from PCQ24 keeping the four dimensions proposed, but slightly modifying two of them by excluding items (in this case, the changed dimensions are called Optimism modified and Resilience modified). This course of action is due to the need to validate an adequate scale to the Brazilian reality when speaking of Psychological Capital, more specifically in the context of academic management; and

c) to conduct a new factor analysis in order to identify which dimensions would be generated from the interpretation of the sample, under an exploratory perspective. The Exploratory Factor Analysis was performed using *varimax* orthogonal rotation criterion, which does not consider an *a priori* correlation among the factors, consequently generating independent factors with concentrated loads on different factors (Damasio, 2012). For analysis purposes, considering the size of the sample, loads lower than .40 were disregarded (Hair et al., 2005).

To compare subgroups, regarding the PsyCap dimensions (both original and modified), Mann-Whitney and Kruskal-Wallis tests were used, since normality

was rejected for the data distributions (Hair et al., 2005). The characteristics that showed significant differences are discussed in the results section.

Finally, qualitative data was treated through Discoursive Textual Analysis (Moraes & Galiazzi, 2007). This analytic approach aims to understand, through textual reconstruction, the contextualized knowledge of the subjects on the matter under investigation. The results were then compiled to produce an integrated analysis of the collected evidences and perceptions.

RESULTS

According to the data collected (Table 1), the respondents present the profile of a mature group, with considerable experience in the university environment. They also referred witnessing the structural changes in HEIs over a period of 10 years, when departments were extinct after the promulgation of Brazilian Law 9.394/96. Seven interviewees said they had experience in leadership positions prior to their current coordination term.

Main professional responsibilities of HPCs

Regarding the main activities developed by HPCs in HEIs, several examples related to program management were referred in the interviews, not only in regard to the pedagogical development, but also in relation to monitoring performance indicators, processes management, and people management. Regarding the later, concerns about administrators, and the relationship among students and faculty members were frequently mentioned. Administrative and financial management activities, such as budgeting, duties organization, events, and definitions related to the number of students per class were also mentioned.

This perception is aligned with Ferreira (2009) and Kanan and Zanelli (2011), who point that the program coordinator gets involved with aspects that range from infrastructure to sustainability. Furthermore, there is not much emphasis on aspects such as the promotion of changes or the encouragement of people (both faculty members and students) as mentioned by Silva (2007), which can raise questions on to what extent HPCs are able to act as leaders.

The interviewees perceive their hierarchical position as complex and relevant, but being overshadowed by the amount of operational tasks that are demanded from them. According to them, such operational responsibilities should be trans-

ferred to administrative assistants trained to do so, and/or to information systems. Operational tasks negatively impact the time they have to devote to manage people and to perform strategic/tactical duties. They also understand that there is an urgent need to review the amount of tasks that are centralized at the program's coordination office.

The focus of the interviewees is not on the lack of adequate development provided by the HEIs to perform their roles, as could be expected based on Burigo and Laureano (2013), Kanan and Zanelli (2011), Santos and Bronnemann (2013), among others. Instead their main complaints were related to the excess of operational tasks, which allows to suppose that they expect to develop their capacities related to management and leadership through successes and errors (Cabeço & Requena, 2011; Cres, 2011).

Considering this general profile, the self-perception of PsyCap was analyzed and also critical incidents gathered in the interviews were examined.

PsyCap Self-perception

As long as HPCs must be able to inspire both faculty members and students, encouraging creativity and generating confidence (Sousa, 2011), we assume that a high score in the perceived PsyCap would be desirable. The self-perception of the HPCs concerning their PsyCap is shown in Table 3. Self-Efficacy and Hope have the higher averages, and Resilience and Optimism have the lower ones, forming two homogeneous subsets, as tested by Tukey test ($p < .01$). Lower results in Optimism and Resilience could have negative consequences on motivation for these professionals. Low motivation in leadership roles is a relevant subject which has been frequent and for a long time present in human resources management's agenda. It is considered one of the factors that most affect engagement and also the job performance.

Considering gender effects, there was a significant result in the original dimensions where Self-Efficacy was higher in men, while Optimism was higher in women. In modified dimensions, Resilience had a higher result for women. As regard to age, the results for the modified Optimism dimension presented differences ($p = .017$), indicating that coordinators in the range between 41 and 50 years old are more optimistic, followed by those who are over 51 years old and finally, the ones who are up to 40 years old.

Referring to experience in Universities, a significant difference in Optimism and Resilience was noted both in original and modified forms. Coordinators with up to 5 years of experience in Universities had lower scores for Resilience in the original dimension in comparison with the other groups ($p = .045$) and, in the modified dimension, coordinators with 5 to 10 years of experience and those with

15 or more years of experience had higher scores (p = .009). More specifically, Resilience (modified) presented two subgroups (Mann-Whitney Test), one with the lower levels of Resilience, represented by HPCs that have up to 5 years or 10 to 15 years in HEIs; the other subgroup has the higher levels of Resilience and is formed by HPCs with 5 to 10 years or 15+ years in HEIs. In both dimensions, Optimism is higher for those with 5 to 10 years of experience (p = .007). Optimism (modified) also presents two subgroups (Mann-Whitney Test), one with the higher levels of Optimism formed by HPCs with 5 to 10 years of experience in HEIs and the other with the lower levels formed by all the other categories. These results imply that Resilience and Optimism peak when someone is working from 5 to 10 years in HEIs.

It is worth to notice that Self-Efficacy and Hope are primarily self-based, while Optimism and Resiliency are more dependent on others and on external environment (Luthans et al., 2007), which could point to influences from culture and, more specifically, organizational culture in these results (both the lower results in these dimensions and the differences among groups regarding experience in HEIs) to the extent to which the development of these PsyCap capacities is encouraged or not by HEIs.

The length of professional experience as HPCs did not show significant differences between groups in any of the dimensions.

PsyCap Promotion

It is supposed that, with higher levels of PsyCap, HPCs would be capable of and motivated to develop other faculty members and students, encouraging an organizational culture in which an ongoing PsyCap development could become the norm, in a contagion effect (Luthans et al., 2007). To analyse PsyCap promotion in faculty members and students, we present in this subsection data from the exploratory factor analysis, as well as from the interviews, focusing on the critical incidents.

Finally, considering all the 24 original items, an exploratory factor analysis was performed. It generated five dimensions:

a) Self-Efficacy was confirmed as in the original dimension (items 1 to 6);
b) Hope (items 7 to 12) was confirmed, except for the item 9 that fell into a fith dimension;
c) Resilience (items 13 to 18) was confirmed, except for item 15 that fell into a fith dimension;
d) Optimism (items 19 to 24) was divided in two dimensions, one including items 20, 22 and 23 (Positive Prospects), and other including items 9, 15, 19, 21, 24 (Positive Attitude).

So, three out of the four original dimensions were confirmed. The fourth dimension, Optimism, was split in two: the first representing positive prospects for the future, and the second representing positive attitudes toward external factors. It is worth notice that when analysing the original dimensions, three of the five items that compose the new factor were excluded (items 15, 19 and 24), reinforcing the idea that the dimension Optimism can be reviewed (Table 4).

Table 4
Factor Analysis

PCQ items	Dimensions				
	1 (Efficacy)	2 (Hope)	3 (Resilience)	4 (Optimism)	5 (?)
QUE 01 (Efficacy)	.725				
QUE 02 (Efficacy)	.681				
QUE 03 (Efficacy)	.784				
QUE 04 (Efficacy)	.775				
QUE 05 (Efficacy)	.713				
QUE 06 (Efficacy)	.499	.440			
QUE 07 (Hope)	**.439**				
QUE 08 (Hope)		.657			
QUE 09 (Hope)					**.400**
QUE 10 (Hope)		.768			
QUE 11 (Hope)		.631			
QUE 12 (Hope)		.709			
QUE13R (Hope)			.493	.433	
QUE14 (Resilience)					
QUE15 (Resilience)					**.417**
QUE16 (Resilience)			.696		
QUE17 (Resilience)			.774		
QUE18 (Resilience)			.581		
QUE 19 (Optimism)					**.573**
QUE 20R **(Optimism)**				.776	
QUE 21 (Optimism)				.490	**.562**
QUE 22 (Optimism)		.403		.497	
QUE 23R (Optimism)				.679	
QUE 24 (Optimism)					**.699**
Explained variance	**15.259%**	**12.986%**	**8.973%**	**8.659%**	**8.238%**

*Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Standardization. The. Converted rotation in 10 iterations
Source: research data (2014)

PsyCap Optimism

Factor analysis indicated two types of Optimism: one concerning the individual construction of positive prospects for the future, by using positive skills for this purpose; and the other, related to the individual attitude toward external factors influencing life, positively or negatively, and their consequences. Qualitative data presented examples of situations in which interviewees had a positive perspective of the future or when they encouraged students to have a more positive perspective, as shown in interviewee I6 statement: *"In relation to students, what I see is that many times our role as leaders, as managers, influences them. It is the idea that they can have a better life. [...] from the point of view of planning their lives this way ... you show a good perspective"*. Such account complies with the conception of PsyCap Optimism as having positive expectations about the future (Luthans et al., 2007). It is also aligned with the idea that Optimism is developed through leniency for the past, appreciation for the present, and opportunity seeking for the future (Luthans et al., 2015). Examples of PsyCap Optimism promotion were also illustrated by situations such as: giving positive feedback to faculty members and helping them to envisage a positive future in the HEI, reassuring students of their strengths, helping them to rethink their choices regarding life and career, and encouraging them to life planning. These basically sum up as situations in which the HPC help subjects to internalized positive aspects of their personality, promoting the belief that more positive events could happen in the future (Luthans et al., 2007).

PsyCap Hope

Fostering PsyCap Hope in faculty members, according to the interviewees, happens when HPCs: stimulate engagement and sense of belonging of faculty members, frequently communicate HEIs' decisions and actions to them, give positive feedbacks, filter information/pressure from superiors, and establish a partnership through trust and transparency. Regarding students, promotion of PsyCap Hope was presented by HPCs as reinforcement of Self-Efficacy. Considering that Hope is developed through goal setting, participation, and contingency planning for alternative pathways to attain goals (Luthans et al., 2015), HPCs present a good understanding about how to generate hope in faculty members.

Interviewees realize that, although it is up to the HEI to set goals and strategic priorities that guide practices, faculty members must be the first to know what is being pursued and why, in order to believe in the goals set. Results indicate that HPCs realize that, to be willing to act and follow the path chosen, even if having to make a few detours due to external factors, it is necessary to be optimistic and self-motivated (Luthans et al., 2007, 2015).

Working with transparency and being a faculty members' partner, makes it easier for a HPC to change the course of action if there is a change in goals, a key condition for the PsyCap Hope (Luthans et al., 2007, 2015). In addition, giving positive feedback to faculty members, according to the interviewees, is a way to generate more Psychological Capital.

Also, Hope, seen as a positive emotional state, is intrinsically linked to the feeling of success (Snyder, 2002), as mentioned in the following interviewee's perception: *"To give feedback of their work, how it is, right? [...] I always communicate because the person has to receive [information about their performance] and it can not be hold back in the coordination. These are things that generate hope [...]"* (I1). This is essential to redirect paths if the original, for some reason, have been blocked (Luthans et al., 2007).

PsyCap Self-Efficacy

PsyCap Self-Efficacy refers to feel capable and confident to overcome chal-lenges (Luthans et al., 2007, 2015). Interviewees claimed to be able to promote it through positive reinforcement, repeated incentives, and feedbacks, as interviewee's I10 points out: *"[...] I seek to encourage quite a lot. To encourage faculty members to act, it's kind of an individual approach, but ... I end up passing that [message] to the group [...] I end up passing it ".* This example is aligned with the idea that efficacy is a byproduct of how much one believes in their skills to mobilize their cognitive resources and attitudes to successfully execute a task (Bandura, 1997 cited in Luthans et al., 2007; Pajares & Olaz, 2008). In addition, a third-party stimulus about the ability to accomplish something reinforces the individual belief that he/she can perform better and better, and this is one key characteristic of PsyCap Self-Efficacy.

In general, HPCs foster students' and faculty members' PsyCap Self-Efficacy by stimulus to autonomy and self-confidence, by reinforcement of the individual strengths, by constant feedback, and also by leading by example. Considering that Self-Efficacy is developed through mastery experiences, modeling and vicarious learning, social persuasion, and physiological and psychological arousal (Luthans et al., 2015), HPCs promote it mainly by social persuasion and feedback.

PsyCap Resilience

Resilience is the ability to tolerate frustration, to persist in achieving goals and overcoming obstacles (Luthans et al., 2007, 2015). As for the promotion of PsyCap Resilience in faculty members and students, interviewees cited situations in which

they played a role of a supportive, attentive and empathic listener, aiming to assist the other to go through a difficult time.

Interviewees also stressed their resilience and the great importance of this dimension of Psychological Capital in a HPC's everyday life: *"[...] I think so, because (…) somehow I make people believe in it or develop their ability of ... of ... of resilience"* (I7). Besides that, they consider the other dimensions of PsyCap (Optimism, Hope and Self-Efficacy) as included in Resilience: *"[...] Then everything got together. He gathered optimism, gathered hope, gathered mainly resilience, because he was a boy who had been totally apathetic and he finally reacted"* (I5 referring to the case of a student). Resilience is developed through asset-focused strategies, risk-focused strategies, and process-focused strategies to influence the interpretation and utilization of assets and risks (Luthans et al., 2015). The interviews pointed out that, in order to promote PsyCap Resilience, HPCs mainly help individuals to reinterpret their situations, in order to better use their assets.

DISCUSSION

The results on the self-perception of the dimensions of PsyCap (Optimism, Hope, Self-Efficacy and Resilience) and its promotion in faculty members and/or students by HPCs are presented in an integrated manner in Table 5. HPCs responded to the survey with consistency, as confirmed by the overall Cronbach's alpha (α = .752).

Table 5
Main findings of research

PsyCap Dimensions	Key findings on interviews	Gender	Age	Experience in Universities
Self-efficacy	Self-confidence as a basis for self-efficacy.	Higher	-	-
(1 to 6)		in men		
	Other people's beliefs about one's effectiveness makes the person believe even more in their potential.	(p=.019)		

	To act on the engagement of faculty members.	-	
Hope	To share info about actions of HEIs.		-
(7 to 12)	To filter info/pressure coming from top management.		
	To be transparent and a partner for faculty members.		
	To give positives feedbacks.		
Resilience (13 to 18)	To share the difficulties faced by faculty members.		Higher for those 21+ years
		-	Lower for those up to 5 years (p =.045)
Resilience (without QUE13R, QUE15)			Higher for those between 5 to 10 years or 15+ years
	To have empathy.	Higher in women (p=.015)	(p = .009).
Optimism	To give feedback helps to improve prospects for faculty members.	Higher	
(19 to 24)	Helping students to think about their career choices promotes optimism.	in women (p=.015)	
Optimism (without QUE19, QUE24)		Higher for those between 41 and 50 years old (p =. 017)	Higher for those between 5 to 10 years (p = .007)

Source: research data (2014)

It was found that, on average, HPCs have a high level of perceived PsyCap. They are confident that: they can be successful in task accomplishment (Self-Efficacy); harness goal-directed energy and proactively plan for alternative pathways for task accomplishment (Hope); persevere when facing obstacles (Resilience); and tend to attribute positive outcomes to self, and negative outcomes to circumstances

(Optimism, either if considered as one or two dimensions) (Paterson et al., 2014). The higher results in Self-Efficacy and Hope could be advantageous for HPCs and the HEIs where they work, since a high sense of efficacy promotes cooperativeness, helpfulness, sharing, and an interest in other's welfare (Bandura, 2001, cited in Paterson et al., 2014). The identification of a dual perception of Optimism, one of them absorbing variables originally attributed to Hope and Resilience, opens a potential discussion about the inner and outer aspects related to this dimension, thus requiring further analysis to be better addressed.

In general, the interviewees could identify situations of PsyCap promotion and how this impacts positively on the work of faculty members. Mainly, to foster PsyCap HPCs rely on giving feedback, reassuring individuals' strengths, helping individuals to reinterpret their situations, leading by example, working with transparency and becoming a partner for faculty members. Regarding the promoting of PsyCap in students, results indicate a perception of being able to help them making better choices about their careers.

Regarding the limitations of this work, could be mentioned that: a) not all HEIs of Rio Grande do Sul State are represented; b) considering that PsyCap is variable (Luthans et al., 2015), it could be beneficial to analyze how HPCs perceive their PsyCap in different moments; as a cross-sectional study, this research does not give a time perspective about the perception of PsyCap the HPCs; c) supervisors of HPCs were not participants on this study, as such it does not regard their perception on promoting PsyCap in HPCs; d) it was not analyzed how faculty members perceive the ability of their HPCs in promoting their PsyCap.

CONCLUSION

This paper analyzed the self-perception of HPCs regarding their Psychological Capital. The quantitative and qualitative results from both survey and interviews allowed to present the coordinator's perception about their Psychological Capital and their ability to foster it in faculty members and students. Also, we identified the main tasks and responsibilities of HPCs according to the perception of the coordinators interviewed. Data collected allowed inferring a profile of overwhelmed professionals with a range of operational tasks (which demand a great deal of time on daily bases) nevertheless most of these tasks could be shared with assistants. As a result, HPCs are typically unable to exercise effective leadership, having troubles to think creatively about the programs they coordinate. Research also allowed to find variables that significantly affect HPC's PsyCap: gender, age and time of experience in HEIs.

Even though no evidence of HEIs investing in, developing, and managing overall PsyCap, HPCs seem to have a general profile that encompasses a high PsyCap. This is beneficial for them and for the HEIs since, as stated by Luthans et al. (2007), performance and attitudinal outcomes from a high PsyCap are expected to be larger than the ones from the individual positive psychological capacities that comprise it.

Future research may address: a) expanding the analysis of self-perception of PsyCap in HPCs, seeking to compare coordinators from private and public HEIs; b) expanding the application of the PCQ24 instrument to other domains in Brazil, seeking for a validation of this scale for Brazilian contexts; it would allow to explore the variations found in Optimism and Resilience dimensions, and also to understand better the fifth dimension of PsyCap that emerged in this study; c) analyze the perception of faculty members on to what amount HPCs are able to promote PsyCap on them, and also the perception of HPCs' supervisors on their own ability to promote PsyCap in HPCs.

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