

Psicologia: Teoria e Prática

ISSN: 1516-3687 ISSN: 1980-6906

Universidade Presbiteriana Mackenzie

Mourão, Luciana; Fernandes, Helenita Perception of workers about inhibitors and fuels of professional development Psicologia: Teoria e Prática, vol. 22, no. 2, 2020, pp. 250-272 Universidade Presbiteriana Mackenzie

DOI: https://doi.org/10.5935/1980-6906/psicologia.v22n2p273-295

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Social Psychology

# Perception of workers about inhibitors and fuels of professional development

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**How to cite this article:** Mourão, L., & Fernandes, H. (2020). Perception of workers about inhibitors and fuels of professional development. *Psicologia: Teoria e Prática*, 22(2), 273–295. doi:10.5935/1980-6906/psicologia.v22n2p273-295

**Submission:** 25/10/2018 **Acceptance:** 17/02/2020



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#### Abstract

Career building is an active process that is built objectively and subjectively throughout life. This study aimed to identify the perception of workers about the fuels and inhibitors of their professional development. We conducted this study in two methodological steps. The first stage consisted of data collection and had the participation of 408 workers (53.9% men), who addressed the elements that acted as fuels or inhibitors of their professional development. In the second stage, we invited ten experts to evaluate indicating the appropriate dimensions for each fuel or inhibitor of professional development, according to the theoretical models. The study contributes with a set of 39 fuels and inhibitors of professional development, distributed in four categories: psychological elements, relational elements, contextual elements, intentional and experiential learning. The results contribute to career studies, and workers can use the findings of this research to reflect and elaborate professional development plans.

**Keywords:** learning at work; career; professional development; inhibitors; fuels.

# PERCEPÇÃO DE TRABALHADORES ACERCA DE INIBIDORES E PROPULSORES DO DESENVOLVIMENTO PROFISSIONAL

#### Resumo

A carreira é um processo ativo que se constrói de forma objetiva e subjetiva ao longo da vida. O objetivo deste estudo foi conhecer a percepção de trabalhadores acerca dos propulsores e inibidores de seu desenvolvimento profissional. O método foi desenvolvido em duas etapas. A primeira consistiu no levantamento dos dados e contou com a participação de 408 trabalhadores (53,9% homens), que abordaram os elementos que atuaram como propulsores ou inibidores de seu desenvolvimento profissional. A segunda etapa foi uma análise por juízes (dez) para agrupamento de tais propulsores/inibidores de acordo com as dimensões de três modelos teóricos de aprendizagem. Como contribuição, o estudo apresenta 39 propulsores/inibidores do desenvolvimento profissional, distribuídos nas seguintes categorias: elementos psicológicos, elementos relacionais, elementos contextuais e aprendizagem intencional e experiencial. Os resultados contribuem para os estudos sobre carreira e podem subsidiar trabalhadores em sua reflexão e elaboração de planos de desenvolvimento profissional.

**Palavras-chave:** aprendizagem no trabalho; carreira; desenvolvimento profissional; inibidores; propulsores.

# PERCEPCIÓN DE TRABAJADORES SOBRE INHIBIDORES Y PROPULSORES DEL DESARROLLO PROFESIONAL

#### Resumen

La carrera es un proceso activo, que se construye objetivamente y subjetivamente a lo largo de la vida. El objetivo de este estudio fue identificar la percepción de los trabajadores sobre los propulsores e inhibidores de su desarrollo profesional. El primero paso del método consistió en la recolección de datos y contó con la participación de 408 trabajadores (53,9% hombres), quienes abordaron los elementos que actuaron como propulsores o inhibidores de su desarrollo profesional. El segundo paso fue un análisis realizado por los jueces (10) para agrupar tales propulsores/inhibidores de acuerdo con las dimensiones de tres modelos de aprendizaje. Como contribución, el estudio presenta 39 propulsores/inhibidores del desarrollo profesional, distribuidos en las siguientes categorías: elementos psicológicos, relacionales y contextuales y aprendizaje intencional y experimental. Los resultados contribuyen a los estudios sobre la carrera y pueden subsidiar a los trabajadores en su reflexión y elaboración de planes de desarrollo profesional.

**Palabras clave:** aprendizaje en el trabajo; carrera; desarrollo profesional; inhibidores, propulsores.

## 1. Introduction

A career is an active process built objective and subjectively using signs from the past, current experiences, desires, and future expectations at work (Ambiel, 2014). In the current context, career-building gains new outlines, as the world is going through a period of frailty in terms of economic growth and weakening of the job market. In that scenario, the professional trajectories are adapted. Other career models arise in the job world (Hall, Yip, & Dorion, 2018). These are based on emphases and models such as Life Design and the Career Building Theory (Ambiel, 2014), which consider a career-building process throughout the lifetime in a hardly predictable work environment.

This type of environment requires constant adaptation strategies throughout the development of one's career, so that the career's adaptability is influenced by the context and the psychosocial interactions that take place in or beyond the work environment (Savickas, 2013). The Norman Arch Model, proposed by Super (1990), rests on the two central dimensions of career theories, one that is subjective (the personal-biographical) and the other one is more objective (the social-geographical).

According to the author, both pillars of the arch interact mutually based on the individual and social aspects, being linked by the self. In that sense, career choice and development are influenced by the person's view of him-/herself and the environment, the way (s)he perceives the context, and the aspects (s)he identifies with.

Super's model (1990) also presupposes social learning as a balance and integration between the pillars of the career development model. In the Norman Arch model, the career is built based on the interactions between the personal and social dimensions, with the meanings the person attributes to the experiences lived. In that sense, the career is two-dimensional, being built from interrelated objective and subjective aspects. Professional development is therefore influenced by elements coming from people, their constructions and expectations for the future, and more objective elements that mark people's life and work trajectory (Fernandes, Mourão, & Gondim, 2019).

Approximating the career and professional development concepts should take into account that both constructs are not exclusively associated with vertical progressions or with the occupation of functions, but with the competencies developed throughout one's academic education, personal experiences, and professional practice (Mourão & Monteiro, 2018). Professional development refers to an intentional and ongoing process of acquisition and improvement of knowledge, abilities, and attitudes, with implications in terms of identity transformations and performance improvements along the occupational trajectory. Mourão and Monteiro (2018) associate this development with the learning processes at and for work, which favor the individual growth in one's career.

This development is therefore process-based and cyclical, and derives from lifelong learning, involving different elements such as targeted objectives, professional identity, analysis of previously gained competences, a survey of gaps and learning opportunities, future perspectives and the construction of a development plan (Paquay, Wouters, & Van Nieuwenhoven, 2012). Hence, according to Mourão, Porto, and Puente-Palacios (2014), professional development can be considered a process of acquisition and improvement of knowledge, skills, and attitudes that favor the performance at work and in the individual career advancement.

In this study, we adopt Mourão et al.'s (2014) definition of professional development due to: 1. the process-based nature of the phenomenon; 2. the clear

connection among the acquisition and improvement of knowledge, skills, and attitudes, as these attributes are dynamic and require renewal over time; 3. the link with career progress and work performance; and 4. the range of the concept, covering different work situations, beyond those linked to formal employment. Therefore, professional development is a theme related to career trajectories, although it does not necessarily mean promotion or job creation (Monteiro & Mourão, 2017). It corresponds to the process of learning knowledge, skills and attitudes, and their use at work, in the form of competencies for professional situations (Paquay et al., 2012) and involves both the formal learning processes and the learning strategies the person establishes (Haemer, Borges-Andrade, & Cassiano, 2017).

The literature about learning represents an important framework to understand this development as a result of the direct relationship between learning in the work environment and the professional development. The concept of learning refers to a psychological process of change that happens in the individual. It does not directly result from the passage of time, from maturing or other phenomena linked to age or life phases (Abbad & Borges-Andrade, 2014). According to this definition, learning refers to long-lasting changes in individual behavior in terms of interactions with other people and with the external environment (Abbad & Borges-Andrade, 2014). In that sense, three theoretical models were chosen because they contain elements that can contribute to professional development, namely: Social Learning Model (Bandura, 1977); Experiential Learning Model (Kolb, 1984); and Learning at Work Model (Illeris, 2011).

According to Kolb (1984), as a result of the life experiences and requirements of the moment, people build their way of learning. The author argues that the experiential learning process is ongoing and cyclical, ranging between the concrete and the abstract, the active, and the reflexive. Hence, Kolb's experiential learning cycle comprises concrete experience, reflexive observation, abstract concepts, and active experience so that learning is necessary first, followed by the intention to transform the experience, understand it and extend this transformation to other learning experiences.

Similarly, Illeris (2011) associates individual learning at work with social factors, like interaction, content, and the dynamics of "incentive-based learning," as well as with environmental factors, taking the technical-organizational and sociocultural learning environments into account. Furthermore, Illeris also values

the individual elements in the process of learning at work, addressing the role of motivation, attitudes, and learning strategies in learning at work.

Bandura (1977), in turn, strongly emphasizes the existing social exchange in learning processes, highlighting the relevance of interactions and what is learned from them. According to that author, vicarious learning rests on the idea that an organism learns a behavior by observing the behavior of another organism through a modeling process based on observation and social limits. Considering this learning model, we depart from the premise that members of different job categories have learning opportunities deriving from the observation of their peers. In some professions, these opportunities tend to be more recurring than in others.

Beyond vicarious learning, in his theory, Bandura also discusses the Triadic Reciprocity, in which cognitive, personal, and environmental behaviors and factors interact mutually and cyclically, leading to changes through observational learning. Hence, according to the author's model, learning takes place through personal influences (such as knowledge and attitudes), as well as through influences from the environment (such as resources and space) and behavior (such as choices and actions). These three elements – personal, behavioral, and environmental characteristics – grant mutual feedback to one another, constituting the cyclical aspect of learning. In this study, we consider that the interdependence of this triad influences the worker's professional development, whether as a fuel or as an inhibitor.

Overall, these three learning models show that professional competency building depends on a set of fuels and inhibitors. Professional development fuels are considered here to be all subjective or objective elements that can favor and enrich the workers' job trajectory. On the opposite, inhibitors of professional development are all elements capable of hampering that development along people's job trajectory. The central premise supporting the existence of such fuels and inhibitors is the fact that the environmental conditions (being able to do), motivations, targets and aspirations (wanting to do), as well as one's own competencies, considered as knowledge (knowing), skills (know-how) and attitudes (knowing how to be), are necessary for competent performance (Abbad & Borges-Andrade, 2014). Hence, internal and external conditions can be relevant for the learning processes at work and for professional development (Monteiro & Mourão, 2017).

Professional development is, therefore, considered an ongoing and holistic process that involves transactions between the person and the environment for knowledge creation (Kolb, 1984). The importance of interaction between the individual and contextual elements is re-emphasized in recent studies that analyze previously identified consensuses on results of training programs, talent management, or professional development models (Bell, Tannenbaum, Ford, Noe, & Kraiger, 2017; Hill, Beisiegel, & Jacob, 2013).

In view of the above, this study aims to get to know-how workers in different jobs perceive the fuels and inhibitors of their professional development. The key question that originated the study was: What brings workers in different jobs to develop themselves to a greater or lesser extent?

To answer this question, five dimensions were initially considered of the theoretical models that could cover the fuels and inhibitors of professional development. These dimensions are in line with the models by Kolb (1984), Illeris (2011), and Bandura (1977) and were expressed in the professional development model by Fernandes et al. (2019), being denominated as follows: psychological elements, relational elements, contextual elements, experiential learning at work and Formal/Intentional Learning. In the next section, the method adopted to survey a set of elements that can contribute to or hamper the professional development process in different jobs is described in detail.

## 2. Method

This study was developed in two stages: in the first, a survey was developed based on a study involving different workers, addressing the elements that, according to them, act as fuels or inhibitors of professional development; in the second, experts analyzed possible clusters of these fuels/inhibitors based on the dimensions of the theoretical models by Kolb (1984), Bandura (1977), and Illeris (2011). These stages of the method will be detailed next.

## 2.1 Participants

In total, a convenience sample of 408 workers participated in the study, seeking a range of work contexts and job categories. In the respondents' profile, men were slightly predominant (53.9%), the average age was 33.9 years (standard deviation = 9 and range from 18 to 70 years), education varied between higher

(53.6%) and secondary (44%) and the mean work experience was 9.1 years (standard deviation 7.7 and range from 1 to 40 years). Among the participants, only 17.1% were in their first job, and 28.3% worked in leading functions. The majority worked in teams, with a mean size of 11.2 participants (standard deviation 13.6). The organizations the participants were affiliated to were mostly private (68.7%), despite a considerable percentage of public organizations (28.3%). The size of these organizations ranged from small (47.5% with up to 100 employees) to large (33.6%, more than 500 employees).

Different activity sectors were also found, the most frequent being: financial/banking/accounting/insurance (15.6%), trade and sales (13.3%), oil and gas engineering (9.5%), education (8.9%), construction (8.4%), legal (8.1%), transport industry (5.5%). In terms of geographical origin, the participants came from all regions, with the following percentages: North 8.2%; Northeast 13.7%; South 22.6%; Southeast - 33.6% and Central-West - 17.3% (4.6% of the respondents did not indicate the region in which they reside). The sample characteristics are shown in detail in Table 2.1.1.

Table 2.1.1. Sample description.

Variables	Categories	n	%
Gender	Female	187	46.1
	Male	219	53.9
Education	Primary education	10	2.5
	Secondary education	178	44.0
	Higher education	157	38.8
	Post-graduation	60	14.8
1st employment	Yes	70	17.4
	No	333	82.6
Leading function	Yes	116	28.6
	No	288	71.1
Type of organization	Private	279	68.7
	Public	115	28.3
	Tertiary sector	12	3.0
Organization size	Up to 10 employees	55	13.7
	Between 11 and 100 employees	136	33.8
	Between 101 and 500 employees	76	18.9
	More than 500 employees	135	33.6
Most frequent activity sectors	Processing industry	19	5.5
	Commerce and sales	46	13.3
	Transportation	14	4.0
	Cleaning/maintenance/surveillance	17	4.9
	Health	7	2.0
	Public safety	3	0.9
	Construction/housing	29	8.4
	Education	31	8.9
	Culture/art	3	0.9
	Finance/banking/accounting/insurance	54	15.6
	Food	5	1.4
	Hospitality/tourism	9	2.6
	Clothing/textile/shoe ware	1	0.3
	Sports/leisure	1	0.3
	Communication	15	4.3
	Technology/informatics	12	3.5

Table 2.1.1. Sample description.

Variables	Categories	n	%
Most frequent activity sectors	Energy/oil and gas	33	9.5
	Legal/judicial	28	8.1
	Scientific and technological research	12	3.5
	Agribusiness/fishing	2	0.6
	Electrics/electronics	4	1.2
	Unions/class entities	1	0.3
	Esthetics	1	0.3
Age	From 18 to 70 years	Mean =	Standard
		33.9	deviation
			= 9.0
Team size	From 1 to 100 members	Mean =	Standard
		11.2	deviation
			= 13.6

The researchers chose participants from a wide range of contexts and functions, given the study's exploratory nature. Therefore, they sought a range of job environments and professions, without controlling in terms of the particularities of these contexts. The aim of the study was to discover how workers in different jobs perceive the fuels and inhibitors of their professional development, without any intent on generalizations.

## 2.2 Instruments

Each participant was invited to consider his/her professional trajectory and identify possible inhibitors or fuels of professional development by answering the following question:

 Looking back on your career, considering your entire professional trajectory, what would be the three main elements that have contributed or hampered your professional development?

Besides this central question, a set of questions was included on sociodemographic and professional data to characterize the research sample properly.

## 2.3 Ethical procedures

Approval from the ethics committee of the Salgado de Oliveira University was obtained under opinion CAAE 39705114.2.0000.5289 (Plataforma Brasil). The subjects participated voluntarily, and the research instrument was distributed in person (73% of the sample), with the support of a network of researchers, and by e-mail (27%), with the support of the same network.

Based on the answers, categorical content analysis (Bauer, 2015) was applied, with clusters by equivalence or similarity of the content of the answers. This method allows the identification of irregularities in the treatment of the text material, respecting the plurality in the participants' answers. Thus, the content analysis was conducted by grouping elements with more closely related meanings, establishing pre-categories that followed dimensions present in the theoretical models underlying the studies (Bandura, 1977; Kolb, 1984; Illeris, 2011). The adopted procedure departed from the initial reading (floating reading), writing down the most relevant aspects of the testimonials' content. A new detailed reading of the testimonials led to the construction of category grids, aiming to fit the fuels and inhibitors of professional development into the five previously established theoretical dimensions. Two independent experts (PhDs in Psychology and researchers in the area) monitored these procedures and later confronted their analyses.

In some cases, the participants included more than three inhibitors or fuels of professional development in their answers. The following answer is an example of this situation:

What most contributed to my professional development was the quality of my undergraduate program and the traineeships I had the opportunity to take part in, besides my desire to learn and to develop myself. And what most hampered my career development was not having learned English at the right time and some anxiety when I started working.

From this example, five fuels/inhibitors of professional development were taken. Although the participants were asked for the three main elements that contributed to or hampered their professional development, the number of fuels/inhibitors extracted varied with the content of each participant's answer.

As a result, the 408 participants' answers produced 1,429 fuels/inhibitors (average 3.5 per participant). The clustering process based on the similarity in the content of the answers led to a list of 57 fuels/inhibitors of professional development, corresponding to a high level of consensus in the opinions, as the number of fuels/inhibitors that was extracted is equivalent to 3.98% of the set of answers.

Then, a detailed analysis took place, with the help of ten experts on the theme, being two researchers, three master's students, and five Ph.D. students in Psychology, all of whom participated in a research group on professional development. The 57 fuels/inhibitors resulting from stage 1 served as the base for the judges' work. They should distribute them among the five dimensions of the theoretical models, namely: psychological elements, relational elements, contextual elements, experiential learning at work and formal/intentional learning.

The judges' work involved two stages, the first being individual and the second a joint debate. Thus, the judges were asked to individually analyze each of the fuels/inhibitors listed and indicate the theoretical dimension it corresponded to. More than one dimension could be chosen, if appropriate. They were also asked to mark any fuels/inhibitors they found hard to classify. Then, a debate was held on the individual classification results of each of the fuels/inhibitors. In this stage of the joint activity, each judge indicated his/her answer, and, in case of a lack of consensus among the judges, they discussed the reasons that led to their respective classifications.

## 3. Results

The results of the judges' analysis were: 1. consolidation of the categories Experiential learning and Intentional learning into a single category; 2. exclusion of 19 fuels/inhibitors, eight of which did not reach the minimum consensus of 80% between the judges, even after the discussion. For the other 11, the judges appointed great content similarity with other fuels/inhibitors on the list assessed; 3. improvements in the formulation of nine fuels/inhibitors better to express the idea in the experts' opinions; and 4. split of one fuel/inhibitor into two distinct items, due to of the judges' disagreement on the similarity of their contents. Hence, the final version of the instrument consisted of 39 fuels and inhibitors of professional development, which were distributed in four categories, namely:

psychological elements, relational elements, contextual elements, intentional learning, and experiential learning.

Table 3.1 presents the result found, following the perceptions of workers in different functions and the judges' analysis. In the table, the 39 fuels and inhibitors of professional development identified in the research are displayed, together with their classification in the four categories. As shown, the category with the largest number of fuels/inhibitors (12) was Psychological elements. The remaining categories each contained the same number (9 fuels/inhibitors).

Table 3.1. Categories of fuels and inhibitors of professional development.

Dimension	Categories of fuels and inhibitors of professional development
Intentional and Experiential Learning	Knowledge gained from experiences
	Learning based on work practice
	Learning as trainee or apprentice
	Professional experiences in daily work practice
	Participation in workgroups
	Ongoing update through reading or research
	Participation in training or qualification events
	Learning from errors
Relational Elements	Ability to learn from more knowledgeable persons
	Exchange of ideas with other professionals
	Professional feedback received
	Tips received during professional life
	Incentive from colleagues or partners
	Valuation by heads
	Stimulus received from teachers or other more experienced professionals
	Family support
	Professional contact network
Contextual Elements	Opportunity to work with good leaders
	Access to relevant information in the work environment
	Work in a constantly evolving area
	Changes in employment or work sector
	Opportunities to replace the head or colleagues
	Opportunities received to enter the job market
	Difficult situations or crises in the work environment
	Opportunity to work with modern tools or equipment
	Work environment favoring development

Table 3.1. Categories of fuels and inhibitors of professional development.

Dimension	Categories of fuels and inhibitors of professional development
Psychological elements	Ability to adapt to new things
	Spirit to act in the profession
	Determination towards obstacles
	Willingness to solve work issues
	Ability to reflect on one's activities at work
	Ability to analyze one's successes and failures
	Perseverance to achieve objectives set
	Courage to face challenges
	Flexibility to reconsider one's own opinion
	Ability to act in situations of pressure at work
	Positive attitude in conflict situations in the work environment
	Humility to learn
	Ability to cope with conflict situations in the work environment

The analysis of Table 3.1 shows that the category Psychological elements comprises the professionals' set of skills and attitudes that could contribute to or hamper their professional development process. This category includes elements such as motivation, openness to changes, pro-activeness, self-knowledge, persistence, fear, and ability to listen.

The category relational elements, in turn, represents the importance of the different actors with whom people interact in their professional practice and who can influence the professional development process direct or indirectly. Answers were grouped into patients/clients, colleagues/partners, heads, suppliers, subordinates, teacher/coach/mentor, or relatives figure as fuels/inhibitors in this category.

The category experiential and intentional learnings, which consists of two complementary theoretical dimensions, corresponds to the result of what is learned through exploration and daily interaction, as well as of the systematic and structured knowledge aimed at contributing to learning at work. Therefore, it involves personal and professional experience, experience exchange, traineeships,

and other professional opportunities, significant content from courses, events, training, research, readings, or studies.

Finally, the category Contextual Elements refers to the set of situations and scenarios present in the professional environment, which can somehow influence learning at work and people's development. The following are part of this category: acceleration of changes, diversity of experiences, job insertion at the start of one's career, supervision, coaching, problems or difficulties experienced, opportunities and challenges on one's professional path, investment received or made, support, and management of errors and failures.

The four categories resulting from the content analysis and the judges' analysis (psychological elements, relational elements, contextual elements, experiential/intentional learning) demand that we turn to the theoretical models underlying the study. In the next section, the results obtained in the light of these models are discussed.

## 4. Discussion

The objective of this study was to discover how workers in different functions perceive the fuels and inhibitors of their professional development. There was no need to separate the results found between fuels and inhibitors because, in almost all cases, the presence or absence of each element characterized it as a fuel or inhibitor. Thus, the courage to face challenges would be a fuel of professional development, while lack of courage would be an inhibitor.

The consolidation of the categories Experiential learning and Intentional learning in a single category, in accordance with the judges' suggestions, is in line with the literature in the area, as authors such as Abbad and Borges-Andrade (2014) and Monteiro and Mourão (2017) argue in favor of a combination of formal and informal learning. In addition, the four categories of fuels/inhibitors of professional development that resulted from this research are in line with the three learning models adopted and with the main career theories (super, 1990; Savickas, 2013). Besides the learning dimension, the psychological, relational, and contextual elements are clearly linked to the Triadic Reciprocity theory, in which cognitive, personal, and environmental behaviors and factors interact mutually and cyclically and provide mutual feedback. As observed, the interdependence

of this triad influences the professional development of the workers in different occupational categories.

Specifically concerning the psychological elements, the workers mention a set of fuels/inhibitors, such as the ability to adapt to new things, spirit to act in the career, determination towards obstacles, ability to reflect on one's activities at work, humility to learn, and courage to face challenges. The items in this dimension demonstrate that the worker's characteristics, also in terms of personality, are considered elements that potentially contribute to or hamper professional development.

This result endorses Super's Norman Arch theory (1990), which adopts personal-biographical aspects as one of the supporting pillars of the career theory. Also, the items in Psychological elements approach Kolb's Experiential Learning Model (1984), as the author discusses learning from feelings and learning by thinking, putting forward the reflexive process as a core element for learning to take place.

In Illeris (2011), psychological acquisition exists in the "dynamics of incentive-based learning" branch, which includes motivation, attitudes, and learning strategies as components of learning at work. Furthermore, the author also includes work identity as an important element of learning in the work model. Finally, in Bandura (1977), the Psychological elements also stand out, because learning by observation and modeling of external behavior involves a cognitive process, which compares the stimuli that precede and derive from the other organism's response.

The relational elements comprise fuels/inhibitors such as the exchange of ideas with other professionals, tips received during professional life, incentive from colleagues or partners, stimulus received from teachers or other more experienced professionals, family support, and professional contact network. This set of items shows that, beyond the aspects of the person him/herself, there is a set of social support aspects that interfere in learning at and for work (Abbad & Borges-Andrade, 2014) and in the worker's development (Fernandes et al., 2019).

The results concerning the relational elements are in line with what Kolb (1984) calls learning by listening and observing, as the author's model indicates that the learning process ranges between the internal and the external, necessarily supposing social interaction in experiential learning. This social interaction also lies

at the heart of Illeris' model (2011), who considers that individual learning and the work environment are linked through social interaction. In Bandura's case (1977), the Relational Elements also occupy a central position in the process as, in the author's concept, learning is based on social exchange and modeling of the other person's behavior.

Experiential/intentional learning, in turn, comprises items such as knowledge gained from experiences, learning based on the work practice, professional experiences in daily work practice, participation in workgroups, recycling through readings or research, and learning from errors. The set of items in this dimension enhances the importance of learning from experience and experiences in daily work practice, leading to conclusions on the importance of informal learning for professional development.

Thus, the experiential/intentional learning dimension is in line with Kolb's learning by doing (1984), which is the element with the highest weight in the author's model. Although Kolb (1984) also considers intentional learning and assesses that formal and informal learning give mutual feedback, experiential learning is the focus of the author's theory. In Illeris (2011), Experiential/intentional learning figures in different points of the model: 1. in the learning content, involving knowledge and skills; 2. in the individual learning processes, which include social history, education, training, and work experience; and 3. in the professional practice. In Bandura (1977), although learning at work is not the focus, Experiential/intentional learning is also present, whether in the imitation and modeling processes that represent vicarious learning dynamics or in the cognitive element that presupposes intentional learning.

Finally, the contextual elements involve aspects such as the opportunity to work with good leaders, access to relevant information in the work environment, changes in the employment or work sector, opportunities to replace the head or colleagues, and the work environment favoring development. Based on this dimension, it can be concluded that objective aspects exist that make the person experience greater or lesser professional development. Hence, the professional trajectory depends not only on the choices coming from the worker, but also on the opportunities offered by the environment (s)he is inserted in.

These contextual elements are in line with learning by observing and learning by doing in Kolb's model (1984), as experiential learning takes place based

on the insertion in the job context and the experiences of observation and task execution (concrete practice). The Contextual Elements are also strongly present in Illeris' model (2011), as the author adopts the work environment as the base of his model, in terms of the social and cultural environment of organizational learning. Bandura (1977), in turn, expresses the Contextual Elements in the triadic reciprocity theory, according to which learning depends on psychological, environmental, and behavioral factors. In that logic, the environment is one of the structural elements of learning, being considered a contextualized phenomenon.

For the sake of graphical representation of the results found, the three central elements of Triadic Reciprocity in Bandura's model (1977) can be used as the starting point. Although the study departed from five theoretical dimensions, the results confirm four categories of fuels and inhibitors of professional development, all of which are present in the three theoretical learning models. Hence, the triangulation, which comprises the personal, behavioral and environmental factors of Bandura's model, is associated with the Psychological elements; Contextual Elements; Relational Elements and Experiential/intentional learning, resulting from this study's analysis categories. Similarly, these categories are in line with the models by Kolb and Illeris, as shown in Figure 4.1.

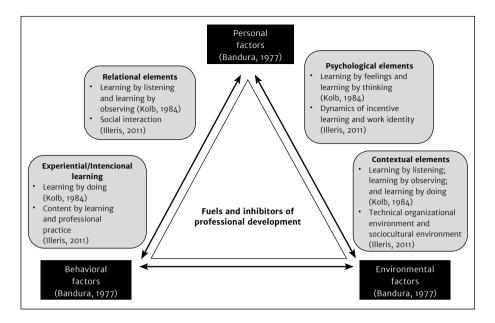


Figure 4.1. Categories of fuels and inhibitors of professional development in the light of theoretical models.

These study results become particularly relevant when considering the new outlines of career development, with the perspective of the Career Construction Theory and the Life Design model, which require that the worker adopts an active attitude to construct his career trajectory (Ambiel, 2014; Savickas, 2013). In that sense, to enable the professionals to attribute meaning to their experiences, it is fundamental to understand how the dynamics of their professional development takes place. In addition, the fact of having heard workers from 18 to 70 years old represented the fuels/inhibitors of development in different phases of the career trajectory, each with its challenges (Fernandes et al., 2019).

The main conclusions of this research are: 1. the fuels and inhibitors of professional development comprise psychological, relational and contextual elements; 2. the separation between formal and informal learning at work is increasingly thin and experiential learning stands out in the perception about the fuels and inhibitors of professional development; 3. despite the particular characteristics of the professions and job contexts, one may consider fuels and inhibitors that are relevant for different

professional environments and categories. Based on the study, the process-based and cyclical nature of professional development can also be confirmed, which derives from lifelong learning, involving different elements (Mourão et al., 2014; Paquay et al., 2012). What is more, the categories found in the workers' answers do not only confirm the theoretical learning models by Bandura (1977), Kolb (1984), and Illeris (2011), but are also in line with the specific literature on professional (Haemer et al., 2017; Hill et al., 2013; Monteiro & Mourão, 2017) and career development (Ambiel, 2014; Savickas, 2013; Super, 1990).

Summarizing the contributions of this study, the identification of fuels and inhibitors of professional development can support reflexive processes on the professional trajectories and offer a view to the elaboration of career development plans. The provision of a grid of analysis categories also offers a contribution to diagnose possible bottlenecks in the professional development process in the Brazilian context. Finally, the focus on the workers' perception of the fuels and inhibitors of their professional development contributes to research on career and work trajectory.

As a limitation, some sample characteristics can be appointed. On the one hand, the sample was enough to survey a relevant set of fuels and inhibitors of professional development; on the other, the representation of some activity sectors was small, such as health, public safety, and food. Ideally, the participants would come from different sectors, aiming to guarantee the cross-occupational nature of the research. In that sense, future studies are suggested, using samples that permit comparing the results of different occupational categories and job contexts.

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