WORK ANALYSIS IN ORGANIZATIONS – DEFINITION, USES AND METHODS

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ABSTRACT. Work analysis is a process used to understand what the important tasks of the job are, how they are performed, and what human attributes are necessary to carry them out successfully. Work analysis is an attempt to develop a theory of human behavior about the job in question to support management decisions. This paper defines work analysis, discusses its main uses in organizations, and presents the objects of study and the methods of work analysis. This paper also discusses how work analysis is done, considering the following steps: types of data to be collected, data sources, data collecting methods, summary of the information and work analysis reports. This paper ends with the differentiation of work analysis and individual competence modeling and brings arguments to endorse work analysis as an intervention of work and organizational psychology.

Keywords: Job analysis; job evaluation; work organization.

ANÁLISE DO TRABALHO EM ORGANIZAÇÕES – DEFINIÇÃO, USOS E MÉTODOS DE REALIZAÇÃO

RESUMO. A análise do trabalho é um processo que busca compreender quais são as tarefas importantes de um trabalho, como elas são realizadas e que atributos humanos são necessários para a execução exitosa deste trabalho. Configura-se em uma tentativa de se desenvolver uma teoria do comportamento humano do trabalho sob análise, a partir da qual decisões sobre gestão de pessoas podem ser tomadas na organização. Este artigo define análise do trabalho, discute seus principais usos em organizações, detalha os objetos de estudo e os métodos de análise do trabalho. A partir dessas bases, apresenta como a análise do trabalho pode ser realizada, considerando-se os seguintes passos: tipos de informações a serem coletadas, fontes de informação, métodos de coleta de informações, síntese das informações e apresentação de relatório da análise do trabalho. O artigo finaliza com a diferenciação entre análise do trabalho e modelagem de competências individuais e traz argumentos para o posicionamento da análise do trabalho como uma ação própria da psicologia do trabalho e das organizações.

Palavras-chave: Análise de função; avaliação de cargo; organização do trabalho.

ANÁLISIS DEL TRABAJO EN LAS ORGANIZACIONES – DEFINICIÓN, PROPÓSITOS Y MÉTODOS DE REALIZACIÓN

RESUMEN. El análisis del trabajo es un proceso que busca comprender las tareas más importantes de un trabajo, cómo son realizadas y cuáles son los atributos humanos necesarios para una ejecución exitosa de este trabajo. El análisis del trabajo es un intento de desarrollar una teoría del comportamiento humano del trabajo bajo análisis, la cual permite la tomada de decisión sobre gestión de personas en las organizaciones. Este artículo define análisis del trabajo, discute los principales usos en las organizaciones, detalla los objetos de estudio y los métodos de análisis del trabajo. A partir de estas bases, presenta cómo el análisis del trabajo puede ser hecha, considerando los siguientes pasos: tipos de información que deben recogerse, fuentes de información, métodos de recogida de información,

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síntesis de la información y la presentación de informe de análisis de trabajo. El artículo concluye con la diferenciación entre el análisis de trabajo y el modelado de competencias individuales y trae argumentos para situar el análisis del trabajo como una intervención propia de la psicología del trabajo y de las organizaciones.

Palabras-clave: Análisis de puesto de trabajo; evaluación de cargo; organización del trabajo.

Introduction

Most part of the scientific literature on work psychology emphasizes that work analysis is the prime step with respect to all decisions and applications of psychology to people management (Wilson & Dierdorff, 2012; Morgenson, Delaney-Klinger, Mayfield, Ferrara, & Campion, 2004). These applications involve job descriptions, recruiting and selection, training and development, evaluation of performance, payment systems, career development, health and security at work, among others (Brannick, Levine, & Morgeson, 2007; Sanchez & Levine, 2012; Spector, 2012). In this context, if the analysis of work is the basis for work psychology, then the use of methods is the basis to the realization of a valid work analysis (Wilson & Dierdorff, 2012).

There are many methods for the analysis of work and the choice of the most adequate one depends on the goals for which the analysis is conducted. Consider for example the following areas that conduct work research: psychology, ergonomics, and econometrics. These areas use the same source of data, but each has distinct purposes in their analysis (Wilson, 2012). The analysis put forth by econometrics is used by governments, because it organizes the whole work universe into hierarchies, such as jobs, occupations, positions, and it also identifies work tendencies in a whole territory. Psychology and ergonomics seeks to describe the more specific components of the work, of the worker, and of the context in which the work is realized, frequently in one single organizational context.

While the international literature about work analysis is vast, and its practice is a reality (Brannick et al., 2007; Prien, Goodstein, Goodstein, & Gamble, 2009; Wilson, Bennet, Gibson, & Alliger, 2012), the same cannot be stated about the Brazilian reality. National papers about work analysis tend to describe results of analyses carried out in specific contexts (e.g., Maciel, Gonçalves, Matos, Fontenelle, & Santos, 2015), but they do not specify how the work analysis is actually done. Given this reality, this paper aims at defining occupational analysis under the scope of psychology, presenting the main elements that compose this analysis, and offer guidelines on how to carry it out.

In the next sections, it will be presented the definitions, applications and different perspectives on work analysis. It will also be described the main points to be considered in planning the process of work analysis. This paper ends with a differentiation between work analysis and modeling individual competencies.

What is work analysis

Work analysis is the process that seeks to better understand what are the important tasks of a given work, how they are carried out, and what human attributes are necessary to the successful realization of this work (Landy & Conte, 2010; Dierdorff & Morgeson, 2009). The result of work analysis is a document containing summarized description of this information (Brannick et al. 2007). For this reason, Wilson (2012) refers to work analysis as process and as result. Work analysis consists of an attempt to develop a theory of human behavior in a given work (Landy & Conte, 2010). "This theory will include performance expectations (properties of the work in the context of the organization's expectations) as well as the required abilities, knowledge, experience, skill, and personal characteristics necessary to meet those expectations" (Landy & Conte, 2010, p.199).

Occupational analysis was originally denominated "job analysis" and it was renamed to work analysis in 1990s (Sanchez & Levine, 2012). The fact that job analysis was unable to cover the dynamic and mutable nature of work in contemporaneity influenced the change in label (Morgeson & Dierdorff, 2011; Sackett & Laczo, 2003). It is considered, therefore, that work analysis is a "label that

best reflects the boundaryless nature of the evolving roles that individuals play within organizations" (Sanchez & Levine, 2012, p. 398).

Uses of work analysis in organizations

Work analysis is used to support decision in people management, to train and develop, and to organize work (Wilson, 2012). Brannick et al. (2007) present a non-exhaustive list of uses of work analysis: description, classification, evaluation and job descriptions, requirements and specifications in people management, planning of human resources, efficiency, security, and legal requirements. These authors also cite social uses of work analysis, such as career counseling, in which knowledge of a job may help people find jobs aligned with their characteristics and attitudes. Details about the uses of work analysis could be accessed in Brannick et al. (2007), Piren et al. (2009), Wilson et al. (2012), Landy and Conte (2010), and Spector (2012).

When it comes to the realization of work analysis, the first decision to be made is the goal. The information of work analysis is used, for example, to plan a system of selection, or to identify the needs of training and development? Powell, Woodhouse and Guenole (2012) point out that the different goals require the use of different methods. For example, if work analysis is carried out in order to support selection processes, the relevant information is a detailed description of the candidate's knowledge and abilities, which enables the candidate to perform the tasks of the job. On the other hand, when the result of work analysis is to be used to aid the identification of training and development needs, so it is expected a detailed description of what the worker is supposed to do in a given position.

The object of study and the methods of work analysis: focus on work, on worker, and on context

The initial focus of the methods of work analysis was in work itself. These methods, proposed in the decades of 1950 and 1960, examined tasks, activities, responsibilities, and other characteristics, or results of the work. The focus was on the "goals" and "verifiables" of the work (Harvey & Wilson, 2000), and on behavior associated with work and work conditions. Thus these methods were called "work driven" methods (Schippmann, 2010), or "task oriented method" (Brannick et al., 2007).

Examples of work oriented methods include time and motion studies, functional work analysis the inventory of tasks, and the technique of critical incident (Brannick et al., 2007). In these methods, the description of the work starts with performed tasks, with tools and machinery (when it is the case), and with a description of the work context. Landy and Conte (2010, p. 203) point out that a work oriented analysis for a job of removing snow at a ski station, the description could include the following sentence: "operates ice removing tractor, usually during the nights, to level the snow of the marks left by skiers and the new snow that has fallen down".

Approximately two decades after, a second class of methods for work analysis was developed. This new body of methods had its focus on the people who did the work. These methods focus on the knowledge, abilities, experiences, personality traits, and other characteristics, necessary for the realization of a given job (Schippmann, 2010). Given this focus of analysis, these methods are denominated "worker oriented methods" (Schippmann, 2010). The example of the job of removing snow presented above, in the perspective of worker oriented method, there would be a sentence like: "Evaluates the field, the depth and the condition of the snow, and selects the depth of snow cut, as well as the number of times the tractor must pass the field" (Landy & Conte, 2010, p. 203).

Sanchez and Levine (2012) support worker oriented methods, and argue that the required characteristics of people to the realization of a given job are an intrinsic component of work analysis. What is more, this procedure makes work analysis a truly psychological endeavor. Examples of worker-oriented methods include: methods of elements of work; questionnaire of analysis of position; and cognitive work analysis (Brannick et al., 2007).

With the development in the decade of 1970, mixed or hybrid methods focus jointly in the two types of information (Schippmann, 2010). Besides these classic methods of work analysis used individually or

combined, Sanchez and Levine (2012) call our attention to a complementary possibility of work analysis, one which evaluated the data from context in which these activities are realized. According to these authors these three objects of study (the behavior related to work, the workers' attributes, and the context) are the central elements of a proper work analysis. Departing from a comprehension of these objects and methods, the following section deals with the realization of work analysis.

How to conduct a work analysis

The methods employed in work analysis have similarities, despite their distinct goals. Common to all methods, for example, is the need to make decisions regarding the types of information that need to be collected, the source of information to be contacted, the specific methods of data collections, and the way to synthesize and present the results of work analysis (Brannick et al., 2007). These decisions should be taken during the planning phase of a work analysis. These elements will be described in the following subsections.

Types of collected information – descriptors of the job, of the worker, and of the context

When a decision about the work or the worker is made, it is necessary to demonstrate that the information used to make this decision is effectively related to the work being done both for legal and procedural reasons (Wilson, 2012). In this section, we present the types of information that may be collected in a process of work analysis. The term descriptor specifies the types of information collected and evaluated during a work analysis (Brannick et al., 2007).

Activity descriptors specify how the work is executed in behavioral terms, and encompass tasks and responsibilities (Dierdorff & Morgeson, 2007, 2009). A task may be understood as a "complete part of the work, that involves a particular goal" (Spector, 2012, p. 59). It uses specific elements, such as an action, a action object, and an action goal. One of the tasks of a police officer, for example, could be described as "go to a suspect's house in the police car, and place him under custody" (Spector, 2012, p. 59).

While tasks are specific to a job in itself, responsibilities are more general, and are described in terms of the behaviors used to the realization of more ample goals, potentially present in different works (Cunningham, 1988). For example, responsibilities may include items such as "interpret visual information", or "decide the best moment to intervene in a conflict situation". Brannick et al. (2007, p.10) interpret responsibility more specifically, equating it with the "level of authority and responsibility associated to the occupant of a position. For example, in analyzing the job of bank manager, it could be useful for the work analyst to know if the manager can approve loans, and if he can, what is the amount of the loan".

Attributes, on the other hand, refer to descriptor oriented toward the worker, and include knowledge, abilities, and other characteristics, such as personality traits. These constructs represent KSAOs (*knowledge, skill, ability, and other characteristics*), that have become the reference for describing the requirements for a job, and, later, for describing individual competences (Schippmann, 2010).

The first attribute, knowledge, has to do with a set of facts and information about a given domain, such as biology, psychology, or engineering (Constanza, Fleishman, & Marshall-Mies, 1999). It can also be understood as a "set of organized information, usually of factual and procedural nature that, when applied, enables the adequate performance of a job" (Prien et al., 2009, p. 21).

Knowledge enables an action, but is not mistaken with it. When an action is observed, necessary knowledge to its realization is assumed or inferred. This knowledge is acquired by means of formal education, training, or accumulated by experience (Landy & Conte, 2010). The following example explicates the difference between action and necessary knowledge to its realization. Prien et al. (2009, p.22) describe the activity of a surgeon: "the surgeon uses the scalpel and makes a long incision in the chest of a coma patient". The necessary knowledge to the execution of this activity would be, for

example: anatomy and physiology of the human body, monitoring of vital signs of a patient, choice of the most adequate scalpel for the procedure, among others.

The international literature about work analysis specifies and differentiates two attributes: skill and ability. Skill is defined as the "practiced act" (Landy & Conte, 2010, p. 115), such as "proficiency in the manipulation or manual, verbal, or mental use of ideas, people, or things" (Prien et al., 2009, p. 22), and such as "the consistent performance of complex activities with a high level of accuracy, effectiveness, and efficiency" (Murphy, 2010, p. 7).

Abilities, on the other hand, are not characteristics directly observable in the worker, but they define his capacity to perform a great number of activities. Examples of this sort include inductive reasoning, spatial abilities, intelligence, perceptual readiness, among others (Prien et al., 2009). They are defined and measured abstractly, the same way personality characteristics are (Landy & Conte, 2010). Ability is thus a stable capacity of executing a specific action or work (Landy & Conte, 2010), by the application of a base of underlying knowledge and necessary aptitudes simultaneously (Prien et al., 2009).

The literature on work analysis also indicates as a descriptor related to the worker as "other characteristics", that may include personality traits or motivational characteristics that may affect the performance on work (such as stress, taking initiative, showing interest, tolerance) (Dierdorff & Morgeson, 2009). Attitudes, descriptor used in Brazilian literature, are one of the "other characteristics".

With respect to **contextual descriptor**, we point out that this term is sometimes used as synonym of "situation", or "environment". Mowday and Sutton (1993) define context as stimuli and phenomena that exist in an environment external to the individual, frequently in a different level of analysis.

Some contextual variables useful for work analysis appear described in Table 01. They involve information related to the place in which the work is realized, to the expected form of realization of the activity in the organization, to the eventual government requirements demanded for the realization of the work and the occupational risks associated to the realization of the work in a specific context.

Figure 01. Contextual variables useful for work analysis. From Brannick et al. (2007).

Philosophy and structure of the organization	Inform the type of organization (private or public) and its mission. Indicate where in the structural organization the position in question is located. Include information about payment methods, and working hours.
Licenses and other requirements	Verify if it is necessary the registration in some professional council, or special certification.
Professional standards	Verify if there are conduct standards established by professional association that affect the performance of work under analysis.
Products and services	Inform which products/services are connected to the work.
Machinery, tools, equipment, procedures, checklist	Specify if the execution of work depends on the use of machinery, tools, equipment, procedures, or detailed list of verification.
Indicators of performance at work	Inform if there are performance indicators, such as time for the realization of tasks, quality standards, and standards that specify the way in which these activities must be realized.
Physical environment, and occupational risks	Inform physical demands, and occupational risks associated to the job. For example, the job requires climbing ladders, lifting heavy objects/ Identify occupational risks using, for example, a risk map (MTE, 1994).
Social environment	Verify contextual social elements, such as supervision, frequency of personal contact due to errors, among others.

The analysis of context is important because, based on it, it is possible to change the environment, in such a way that it may become more adequate for the work and for the worker (promoting the health of the worker, for example). The main source for collection of information about context is the analyst of work, who will consult available information in organization and will collect new information by observing and interviewing workers. Information about context may also be complemented by means of administration of structured questionnaires elaborated to this end (Harman, 2012).

Source of information for work analysis

A source of information is any resource that answers the demand for information from the analyst point of view. The source is where the analyst goes to search for necessary information for the realization of the work analysis. Examples include people, documents, and databases. The decision about the appropriateness of a source of information depends on the nature of the work that is being analyzed, and on the goals of the work analysis (Prien et al., 2009). Sources of information are usually indicated by the method itself (Brannick et al., 2007), but in principle the stronger the information more complete will be the understanding of the work (Guder, 2012).

"Traditional" sources of information include: the occupant of the position; the immediate supervisor of the person whose work is being analyzed; the analyst of the work; written documents; and previous analysis conducted on the organization. More recent sources of information include: people from other units in the organization; managers and executives on higher levels; specialists and technicians; a specialist in training on the organization; and clients or consumers (Guder, 2012; Brannick et al. 2007).

The occupant of the position

The occupant of the position is the best person to describe how the work is being done at that moment, so it is suggested that throughout the whole process of analysis the occupant be considered the main source of information. When there are few people who do the job under analysis, it is prudent for all to be consulted, but when it is the case that there are hundreds or thousands of people, it is suggested the realization of a procedure inspired in stratified random sampling (Guder, 2012).

When it is not possible for the stratified random sampling to be done, it is not advised for the analyst to use only the workers suggested by the supervisor, since supervisors tend to indicate worker with beliefs and positive feelings with respect the work in the organization. It is also prudent for there to be a balance between people with a lot and few experience in the realization of the work.

The occupants of a position are important sources of information for the identification of activities conducted on work, but they are not for the identification of the human attributes associated with these activities (knowledge, skills, abilities, and other characteristics). This is so because the occupants of a position tend to overestimate the attributes for the realization of work, and make use of elements of management of impression when they imagine that work analysis can be used to determine their salary, or when there is risk of dismissal (Guder, 2012).

The supervisors

Information collected from supervisors is of complementary nature. This is an important aspect because supervisors tend to describe with more details how activities should be accomplished than how they actually are. On the other hand, supervisors that observe directly the work can bring information related to the necessary attributes of workers (Guder, 2012).

The analyst of the work

The analyst of the work can be useful as source of objective and valid information because of their education, experience, and because they are not workers of the organization (when it is the case). Having conducted previous work analyses in different organizations, the analyst is able of putting into perspective matters related to work context, especially those matters related with occupational risks (Guder, 2012). For example, workers have an "absolute" perception of the level of the noise to which they are submitted at work, and may consider it high or low. The work analyst can compare the noise level perceived by workers with the real level of noise in order to check the limits established by the law, bringing a valid contribution to the project.

Other sources of information

Other sources of information include people who act in different units of the organization, clients or consumers, documents of the organization, and previous work analysis. People in other sectors of the organization that are internal clients of the services done by specific people can be thus source of information for work analysis, especially with respect to activities and patterns of quality of work.

Clients and consumers can bring useful information when the goal of work analysis is, for example, establishing patterns of performance or identifying tasks that should be done by workers and are currently not. The inclusion of clients could also serve to a political purpose, such as describing by Brannick et al. (2007, p.16). "We have recently partially included members of the community in work analysis of policemen to demonstrate the involvement of the community in work analysis and also the increase the acceptance of the community in the description of positions resulting from work analysis". Although potentially important in some situations, the clients and the consumers should only be asked to provide information concerning aspects related to work about which they have some knowledge.

Finally, documents and previous work analyses conducted are important sources of information because they help the analyst to learn the nature of the work, avoiding unnecessary research. Based on these sources to specific goals of work analysis, the definition of how the information was collected becomes important. There are different methods for collecting information; the main ones will be discussed on the following section.

Methods of collection of information

There are different methods for collecting information, and the decision about which methods to use will depend, once again, on the specific goal of the work analysis. The more consolidated methods are auto-description, observation, and interviews (either individually, or in group), review of documents, and questionnaires (Prien et al., 2009; Brannick et al., 2007; Pontes, 2004). Other methods include technical conferences, diaries, methods based on equipment, review of the literature, and the conduction of work analysis (Brannick et al., 2007).

Auto-descriptions are reports made by workers themselves in writing about the activities and necessary attributes for its realization. This method is considered adequate only in cases of very simple jobs that do not require a lot of training (Prien et al., 2009).

Observation occurs when the analyst follows the job under analysis. It is recommended the use of a protocol of observation, in which the analyst takes notes about the work. In this process, the analyst seeks to capture representative samples of work activities during different periods (for example, if the job is to sell, the analyst observes the sales realized during busy and more calm periods) (Brannick et al., 2007). Observation is especially useful when physical activities are a part of the nucleus of the work. When the job is of a more cognitive nature, observation has less to contribute (Prien et al., 2009). Observation also propitiates a better view of the working context. However, this method takes more time, and there is the risk that the workers change their behavior once they know they're being observed (Spector, 2012).

Interview is the most used method in work analysis. An interview in work analysis consists of a meeting between two or more people whose purpose is to exchange information about the work. More

than one interviewer or interviewee can participate (Van de Voort & Whelan, 2012). In this method, the analyst asks questions about the job being analyzed. Interviews are typically based on what has happened during a period of time, such as the day before, week, or month (Brannick et al., 2007). In a group interview, two or more workers respond to the questions related to the same work at the same time (Van de Voort & Whelan, 2012).

Interviews may be recorded or not. If they are recorded, it is necessary the analyst to have the consent form the interviewee. An interview may be non-structured, semi-structured, or highly structured. Examples of scripts for interviews, just as recommendations for their conductions, can be found in Van de Voort and Whelan (2012). Frequently information obtained in interviews is combined with information obtained by other techniques (Prien et al., 2009; Brannick et al., 2007; Van de Voort & Whelan, 2012).

Documents, too, can be useful to work analysis. Prien et al. (2009) list a set of documents that may be used to this end: evaluation of performance, reports from external buyers and/or internal auditors regarding work matters, and work analysis, and previous job descriptions. Absenteeism rates, turnover rates, and logs of work accidents may be used in work analysis in what concerns health and job security. When a job is highly dependent on machinery and equipment, reading the manuals may generate insights on how the worker must interact with the equipment (Brannick et al., 2007).

A questionnaire in the context of work analysis may be considered as a self-administrated interview, constructed rigorously (Van de Voort & Whelan, 2012). Questionnaires can be applied individually or in groups, in person, or, yet, sent via email or via Internet. Questionnaires are highly effective, practically indispensible, when there is a large sample of workers to be consulted and/or when these workers are located in different regional branches of an organization.

In the same fashion with the interviews, questionnaires can be non-structured (or open) or structured. Non-structured questionnaires demand workers to list their work activities, describing them with their own words. They are easily developed, but they may be subjected to tendencies, because the attitudes of a subject about the wok may influence their answer in an instrument of work analysis (Schnake & Dumler, 1985, *apud* Van de Voort & Whelan, 2012). What is more, the answers on non-structured questionnaires need to be categorized, what demands a significant amount of time of the analyst.

The most effective type of questionnaire is the structured type. This type enables the comparison of information obtained about different positions. The identification of similarities among positions allows the development of instruments of selection, classification of positions to fixate the salary, or, still, the identification of common training needs (Gibson, 2012).

The work analyst also needs to decide whether or not to produce a specific questionnaire or if he will use a questionnaire already available. If he opts for producing his own questionnaire, the items must be developed based on the information collected with workers, supervisors, and other relevant sources (Prien et al., 2009). The questionnaire should undergo a process of validation. It should be considered the time and internal competence for the development of a structured questionnaire of quality.

On the other hand, if one chooses to work with already available questionnaires, there is another set of considerations to take into account. Prien et al. (2009) evaluate that these instruments tend to be well crafted and trustworthy. There are innumerous questionnaires for work analyses, but none has been translated into Portuguese, which demands extra effort in translating and validating them according to the Brazilian context. The most well known questionnaires are *Position Analysis Questionnaire* (PAQ), *Fleishman Job Analysis Survey*, and *O*NET*.

According to Van de Vroot and Whelan (2012), questionnaires need to be standardized, and they do not aim at generating in-depth and detailed information about the work. On the other hand, they are efficient and ease information collection in contexts of great number of workers.

Based on what has ben presented thus far, the decision about using interviews or questionnaires (or a combination of both) for information collection may be considered an evaluation of cost vs. benefits of time used to interview the necessary number of workers versus the efficiency with which questionnaires are applied. Before the advantages and disadvantages of each method, it is interesting that the analyst evaluate the intended goals of work analysis, and thus combine some of them to ensure precision in information collection (Pontes, 2004).

Synthesis and presentation of work analysis report

The synthesis report of work analysis is of paramount importance both to guide actions in people management and to be used in case these choices need to be justified legally (Gutman & Dunleavy, 2012). These two purposes bring challenges to the making of the report: it needs to be presented in a comprehensive form to the managers, and it should also present enough details in order to survive an evaluation in light of working regulations. The report of work analysis should, therefore, precisely and straightforwardly provide the organization with a conceptual connection between duty activities and the necessary characteristics workers should have, so that they can properly perform their functions.

The literature on work analysis report that it is not uncommon for managers to be disappointed with the results of a project of work analysis. This reaction is most of the time related to the form in which the information is presented, lacking clarity on the information about how the information supports the goals of the project or simply with respect to the inadequacies with which results are presented (Wilson, 2012). For these reasons the presentation of the results of work analysis is just as important as its process.

This situation could be corrected with the participation of the managers in the definition of how the results of work analysis are to be presented, which should happen when the project is being planned, before the collection of information. According to Wilson (2012), this recommendation also aids the analysis of usability of the projects of work analysis because the users of the information give suggestions about what they need, and about how they would like to receive this information before it is collected. In this context, a smaller amount of information, presented in graphic form, is more effective than bigger pieces of information presented in table format (Wilson, 2012).

We suggest the use of a model of report which contains the following basic information: information about the job or function on which the report is being made; the activities performed on the work; the necessary attributes the worker must have to perform the job; and the context in which the job is done (Prien et al., 2009).

The list of activities should be presented with the information with respect to their degree of importance and of frequency with which the activity is done. The necessary human attributes for the realization of each activity should also be presented. Simple activities can be sufficiently described in terms of knowledge and abilities, while more complex activities also require the description of skills (Prien et al., 2009). While knowledge, abilities, and aptitudes are presented for each activity, minimally required qualifications for the job should be presented considering the job as a whole (position, or function). Examples of minimally required qualifications include educational levels, and prior experience (Brannick et al., 2007). Finally, we propose that information about the context of work, described in Table 01, be presented in the report of work analysis.

Beyond this basic information, reports specially made for audiences, which present information in such a way that is helps solve ordinary management problems, help in the receptivity of the results of work analysis. Examples include the ten tasks new with which employees have difficulties to perform inside the expected standards of the organization, relevant knowledge to the realization of the work, key matters related to knowledge about the work to ask the candidates, among others.

Final considerations

Decisions on politics and intervention in people management are taken based both on the work that is conducted and the people who realize it, that is, the equation involved a work component and a people component. This paper presented the basis for the realization of a valid work analysis, whose results may be used to decision-making processes regarding people and work in organizations.

Although the realization of work analysis is not exclusive to psychologists, it is argued that the object of work analysis is the central theme in psychology because the comprehension of people's relationship with their jobs is only possible by listening to the people who realize the job. Work analysis has a descriptive purpose (describing behaviors related to the work, workers' attributes, and the context in which the work is done), and does not have a guideline the establishment of an explicit link with organization strategies. These are the two differences between work analysis and modeling of competences. Modeling of competences is prescriptive, and it has a direct link to organization strategies. It is set up with a procedure used to attain the definition and the structure of requirements to an individual's success in a body of specific functions. In this context, competences are human abilities shown in behavior, which are measurable, and relevant to the organization (Schippmann, 2010).

It must be emphasized here that work analysis is the precedent step to people management in organizations, and that modeling of competences must be carried out based on previous knowledge about the how the job is actually done, and the necessary human attributes to its realization in a specific context. When one wishes to realize the modeling of competences (for a future mapping) in a given organization, the precedent step is to carry out work analysis.

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