

# Small opportunities are often the beginning of great enterprises: The role of work engagement in support of people through the recovery process and in preventing relapse in drug and alcohol abuse

Barbara Barbieri<sup>a,\*</sup>, Laura Dal Corso<sup>b</sup>, Anna Maria Di Sipio<sup>b</sup>, Alessandro De Carlo<sup>c</sup> and Paula Benevene<sup>c</sup>

<sup>a</sup>*Department of Social and Institutional Science, University of Cagliari, Cagliari, Italy*

<sup>b</sup>*Department of Philosophy, Sociology, Education and Applied Psychology, University of Padua, Padua, Italy*

<sup>c</sup>*Department of Human Science (Communication, Training, Psychology), LUMSA University of Rome, Rome, Italy*

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## Abstract.

**BACKGROUND:** This study, carried out in five Therapeutic Communities (TCs), aims to evaluate the relationship between social support and sense of community for people with pathological addictions and the personal and professional dimensions of hope, resilience, work engagement, future time perspective, and job performance. Support to the person is attained through social support at work by the supervisor and the person's sense of belonging to the community.

**OBJECTIVE:** The purpose of this article is to analyze the relationship between social support, sense of community, hope, resilience, work engagement, future time perspective, and job performance.

**METHODS:** In order to verify the relations between those variables, structural equation models with observed variables (path analysis) were estimated using LISREL 8.80.

**RESULTS:** The results show a direct relationship between social support at work by the supervisor and hope, as well as between sense of community and resilience at work, while work engagement plays a mediating role between the two antecedents and the personal and professional variables investigated – hope, resilience, future time perspective and performance at work. Performance was measured through both people's self-perceptions and their supervisors' evaluations. A positive correlation exists between the two assessments.

**CONCLUSIONS:** The positive consequences of the research entail both theoretical and practical aspects.

Keywords: Therapeutic community, drug and alcohol addiction, work engagement, positive attitudes, performance

## 1. Introduction

In recent years, the Therapeutic Community (thereafter TC) has become a widespread and consolidated treatment for drug and alcohol addiction.

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\*Address for correspondence: Barbara Barbieri, Department of Social Sciences and Institutions, University of Cagliari, Via Sant'Ignazio, 78, 09123 Cagliari, Italy. Tel.: +39 70 6753700; Fax: +39 70 6753680; E-mail: barbara.barbieri@unica.it.

TCs have been extensively studied with an emphasis on their effectiveness [1]. While studies have consistently reported a decline in drug use and criminal behavior alongside increased prosocial behavior, such as employment among TC residents (e.g. [2]), less is known about the factors that contribute to the TC's effectiveness [3].

Although the immediate goal of reducing drug and alcohol use is necessary, it is rarely sufficient to achieve the longer-term goals of improved personal health and social function and minimized threats to public health and safety, i.e. recovery process [4].

In this perspective, the TC turns out to be a privileged platform to perform a recovery process [5], as it requires the "total immersion" view of treatment, i.e., a highly structured, intensive treatment philosophy combined with long-term residential care [5], and it immerses clients in a supportive environment. This view of treatment allows systematic and continuous work on the "person" at multiple levels and in different demarcated phases of the recovery process from drug addiction [3]. The treatment program in TC involves work with the client enhancing both the person and residual responsibility while recovering autonomy that aims to facilitate the gradual return to a daily life context and improves the chances of finding a job. It is worth noting that the original goals of abstinence and recovery were used interchangeably but nowadays abstinence is considered a fundamental means to achieve a goal and not the goal itself. For this reason, many TCs consider the recovery from addiction as a process in which clients go through different stages or phases of treatment that are clearly demarcated. The last step of the recovery process effects the relative phase of social inclusion and often involves clients in vocational training programs and employment.

Several studies have highlighted how vocational training programs [6], if sustained, produce the effect of improving both employment outcomes [7] and individual outcomes, such as abstinence from the use of substance, and psychological functioning [6]. Previous studies [8] have showed that a steady social support from the supervisor or educator in all stages of the recovery process, as well as a perception of sense of community related to TC [8] play, in general, an important and positive role in treatment and recovery programs for people with addiction problems, especially in the last phase of the recovery process when clients are often included in vocational training programs or placed in the work context.

Social support is generally defined as the resources provided by other persons or as attachments between and among individuals promoting mastery of emotions, offering guidance, providing feedback, validating identity, and fostering competence [9]. Further, a sense of community refers to the perception that an individual needs to belong to a wider community from which to draw identity and support, and to the awareness of being a significant part of it [10].

In our study we have considered social support from supervisor and sense of community from two theoretical perspectives. The self-determination theory [11] in which social support is conceptualized as a relationship between supervisor and employees (in our study clients placed in work activities) characterized by *autonomy* support versus *control* [11], and sense of community that could be considered as the need and the desire to achieve a sense of communion and belonging [12]. People who feel they are part of a team and feel free to express their work-related and personal troubles are more likely to have their need for belonging fulfilled than employees who feel lonely and lack confidence at work [12].

Supportive actions enhance people's self-determination and interest in their work activities. People who are self-determined experience "a sense of choice in initiating and regulating one's own actions" (p. 580) [13]. In this theoretical framework, regarding social support, the literature points out that employees display greater job satisfaction and better physical and psychological well-being when supervisors are perceived as more autonomy-supportive [14]. Indeed, the quality of the relationship between an employee and the supervisor is vital for the employee to achieve higher performance and develop positive attitudes [14]. However, as for sense of community, defined as the perception of being part of a group, several researchers found that it is positively related to employees' well-being (e.g. [15]) and performance evaluations.

The second theoretical model considered in this study is the Job-Demand-Resource (JD-R) [16] model in which social support is considered as a characteristic resource of the job, functional in achieving work goals, reducing job demands and the physical and/or psychological costs associated with them, and stimulating personal growth and development (e.g., [17]). Supervisors who foster a supportive work environment typically show concern for people's needs and feelings, provide positive feedback and

encourage them to voice their concerns, develop new skills, and solve work-related problems [17]. Laschinger, Finegan and Shamian [18] found that if supervisors provide a more supportive environment for their employees, employees will adopt better work attitudes [18]. Schaufeli and Bakker [19] pointed out that a measure of job resources including social support from supervisors predicted engagement [19]. Subsequent studies have consistently shown that in the general population social support from supervisors and colleagues is positively associated with work engagement [19]. In addition, studies have showed the importance of the support provided by supervisors not only in generating a sense of meaningfulness [20], resilience, security and general motivation [21], but also in enhancing an intrinsic or extrinsic motivational role [22]. In light of the above, social support may play a key role in the recovery process of people with drug and alcohol addiction, especially in the phase of release by the TC when many clients are placed in work activities. Therefore, in these contexts, social support may be related to the recovery of positive abilities (i.e. hope), work engagement, and job performance.

In this model (JD-R), sense of community is considered as a characteristic resource of the individual. Workers who experience a sense of community recognize the organization meets their personal and family needs, provides an improvement in the quality of their lives, and expects in return that they are responsible members of the organization and, more generally, of society. The probability that workers will experience a sense of community is greater when the organization behaves fairly towards them, offers challenging activities that encourage interaction between workers, and allows them to have command over work situations without feeling overwhelmed by responsibilities [23].

Sense of community leads to positive consequences because it is rewarding in itself, makes the employee more secure and happier both in personal and professional life, and improves performance and ability to cope with potential difficulties [23].

Among the different definitions of sense of community applied to work that were offered over the years, particularly appropriate for the purpose of this research is that recently proposed by Kinjersky and Skrypnek [24], who see it as an interpersonal dimension of the broader construct of the “spirit at work”, characterized by a feeling of bonding with colleagues based on trust and on the belief of having a shared purpose, that makes the person feel

part of a “community” at work. Identifying personal and social resources, and engaging in prosocial activities should all be considered as components of effective strategies for achieving and maintaining a stable recovery.

That being so, our assumptions progress from the evaluation of social support that each participant received at work from their supervisor and from the participants’ perception of being part of a community and having a common purpose, to hypothesizing a positive relationship with work engagement.

It is hypothesized that work engagement has a positive influence on performance and on future time perspective, as well as on resilience and hope. We aim to evaluate the relationship between self-assessment and hetero-assessment of performance.

Before discussing our results, we briefly review the relevant literature on variables taken into consideration in this study, describing the theoretical foundations upon which the possible relationships between variables are based.

### *1.1. Work engagement*

The degree to which people feel engaged in their work has been found to benefit both the organization and the employees’ health and well-being [22]. Although it is well known in the literature that being engaged in a job has a positive effect in terms of both health and job performance, not only in the general population [19] but in people involved in the recovery process [25], to our knowledge no study has investigated the role of work engagement as a crucial state of mind at work, able to support people in the recovery process, and significant in preventing relapse to drug and alcohol abuse. Schaufeli, Bakker, and Salanova [26] defined work engagement as “a positive, fulfilling work-related state of mind” that is generally characterized by three aspects: vigor, dedication, and absorption. Some researchers have reported results for each dimension separately (e.g. vigor [19]), whereas others have described a single factor (e.g. work engagement [27]). In the relevant literature, work engagement has been studied mostly as an outcome of work/task related characteristics or as a predictor of, for example, health outcomes (i.e. positive emotions, [28]) and job performance. Based on these connections, it is likely to expect that employees will develop a state of engagement toward their work when receiving support from their supervisors. In other words, work engagement will generate positive emotions and improve job performance when

employees experience support from their supervisors. Although no previous studies exist, we tested the moderating role of work engagement in the relationship between social support at work and individual future time perspective.

### 1.2. Hope

Hope can be considered both a “trait” (or dispositional) and a “state”: the dispositional type refers to a person’s construct that is relatively stable over time and in different situations; the state type is related to specific situations and limited in time. In the debate on the two perspectives, Snyder believes that people can benefit from both hope of a dispositional type and hope of a state type, as is shown by the little variation between measures of trait-hope and state-hope [29].

With particular reference to pathological addictions, a style of thinking oriented toward hope is an important factor in the process of recovery from substance abuse. Indeed, the objective of remaining abstinent for a long period of time requires the perception of being able to do so and the understanding of the means by which to achieve this objective. It has been shown that people with high levels of hope are better able to deal with situations that may compromise the objective of the recovery from substance abuse and to develop strategies to overcome the factors that lead to a relapse or, in the case that this has occurred, strategies to resume the commitment to abstinence [29]. Mathis, Ferrari, Groh and Jason [30] in a recent contribution anticipate that research, as seems to emerge from the literature, will explore the construct in order to further confirm that high levels of hope, not only of the dispositional, but also of the state type, play an important role in the process of recovery from substance abuse. To date, however, knowledge is limited to a few studies granting results which are not always univocal. The same authors, in accord with a study of Jackson, Wernicke and Haaga [31] found that high levels of hope are associated with a lower probability of admittance in a recovery program, probably due to an excessive confidence in one’s own abilities and underestimation of the need of professional intervention. They noted that hope is a predictor of abstinence from drug but not alcohol abuse in the advanced stages of the recovery process. If high levels of hope play a significant role in the process of recovery from substance abuse then hope should be promoted in all areas, including work that

may itself be a source of hope or a place where hope is lost [32]. Taking into consideration the dimension of hope in workers with a pathological addiction is therefore essential to favor the delicate process of recovery.

### 1.3. Resilience

Although there are many definitions of resilience in the literature, the majority are based on two key concepts: adversity and positive adaptation [33]. Resilience comes into play not only in overcoming adversity, conflict, or failure, but also in instances of positive events such as work commitments that require the assumption of new responsibilities. As underlined by Fadardi, Azad and Nemati [34] resilient people benefit from a better mental health status and are probably less inclined to engage in risky behaviors, such as substance abuse. For an in-depth analysis of positive psychology applied to the abuse and the pathological addiction to substances as well as to the recovery process, see Krentzman’s recent review [35].

### 1.4. Future time perspective

Time represents an important basis for helping us understand our experiences, including shaping our thoughts, decisions, and behaviors. According to Zimbardo and Boyd [36], time perspective is a semi-conscious process in which temporal categories or frames constitute a socio-cognitive variable that influences perceptions and actions by marking them with a temporal composite [36]. Likewise, these past, present, and future temporal frames are used in forming everyday expectations, goals, and imaginative views that help individuals give meaning, order, and coherence to everyday life events and to personal and social experiences [36].

Treatment programs for drug addiction [37] have influenced the length of future time perspective, which suggests perceived life circumstances are an important determinant of future time perspectives. Also, time perspective is an important individual difference contributor to any analysis of the social and psychosocial dynamics of substance use and abuse. Most research in this field seems to suggest that drug users have shorter time perspectives compared to controls [38]. The treatment process in general, and employment status [39] in particular, could affect the recovery of long-term personal goals, which is

typically linked to future time perspective. From the scant research that exists, it appears that a recovery of future time perspective could encourage health maintenance or illness prevention [36].

### 1.5. Job performance

The concept of job performance commonly refers to the carrying out of an activity, a behavior, in a given situation. Job performance is the contribution to the organization by the employee: what s/he, using his/her skills, has managed to achieve in relation to the position that s/he occupies in the organization itself.

According to Goodhue and Thompson [40] job performance is a measure of the ability of a person to perform a specific task, the effort made by a worker to achieve the goals and standards set by the organization. The feeling of being part of a community, the existence of a positive relationship between colleagues, and the concrete sharing of purposes and meanings in daily work experience improve workers' performance [39]; also, the support of a supervisor who motivates workers and encourages them to achieve the objectives showing his/her appreciation for their achievements improves their performance [25].

## 2. Method

### 2.1. Participants and procedure

Participants were 98 clients from five TCs in Italy (three located in Sardinia and two in Veneto). The TCs generally require a commitment of up to three years, although in recent times in Italy, most programs have reduced their duration to as little as 3, 6, or 12 months [3]. All TCs involved in our research require clients to go through different stages or phases of treatment that are clearly demarcated. In all these TCs a critical assumption is that stable recovery depends upon a successful integration of both social and psychological changes as measured by abstinence from drugs, active participation in the program, and adherence to the program rules. Drug tests performed on urine samples are utilized to monitor abstinence. Vocational training and employment are part of the last step of the recovery process, the relative phase of social inclusion. Participants were recruited by a supervisor, the person within the TC who follows the client's daily occupation including

work activities. This person, together with a member of our research team, briefly presented the study to clients who fit the research criteria for employment. Clients had chosen freely whether to participate in the research. The information accompanying the questionnaire stated privacy would be guaranteed; all data would be treated confidentially and stored in secured computer systems.

All participants involved in our research were monitored in the TCs by the supervisor for at least three months. The substances abused were: heroin 41, 8%, cocaine 14, 3%, alcohol 17, 3%, other 26, 6%.

Eighty-four percent of the participants were male. Ages ranged from 20 to 58 years ( $M=38.71$ ,  $S.D.=9.65$ ).

Apropos educational level, 46.4% had completed junior high school or less, 52.6% had attended some high school, and 1% had a university degree.

### 2.2. Measures

*Social support at work* was measured through the Italian version of the short form of the Work Climate Questionnaire (WCQ) [25]. The scale contains six items to assess individuals' perceptions of the degree to which the supervisor is autonomy-supportive versus controlling. Participants responded to WCQ items on a 3-point asymmetrical rating scale ranging from 1 (*strongly disagree*) to 3 (*strongly agree*), in which they indicated their perceptions of supervisors (i.e. "My supervisor trusts my ability to do my job well"). In the present study the alpha coefficient of internal consistency was 0.89.

*Sense of community* was measured with three items, taken from the 18-item scale of Kinjersky and Skrypnek [41] and translated into Italian, aimed to detect this dimension at work (for example, "I feel a sense of confidence and bonding with my colleagues"), on a 6-point Likert scale, from 1 (*strongly disagree*) to 6 (*strongly agree*). In the present study alpha was 0.62.

*Work Engagement* was measured through the Italian version [42] of the Utrecht Work Engagement Scale (UWES-9) short version. The UWES-9 scale items were scored on a 7-point asymmetrical rating scale ranging from 0 (*never*) to 6 (*always*). The scale takes into account three aspects of work engagement: vigor, dedication, and absorption. Sample items are: "At my work, I feel bursting with energy"; "I am enthusiastic about my job"; "I feel happy when I am working intensely". In the Italian study the reliability

coefficient was 0.92. In the present study alpha was 0.96.

*Hope* was measured through the Italian version [43] of Snyder's scale because it is considered to be more suitable to detect the construct with particular reference to work and organizational contexts. Hope was measured through seven items (for example, "I think that at work there are many ways to solve a problem") on a 6-point Likert scale from 1 (*strongly disagree*) to 6 (*strongly agree*). In the present study alpha was 0.84.

*Future Time Perspective (FTP)* was measured using the Zimbardo Time Perspective Inventory (ZTPI) in its short validated Italian version [44]. This instrument consists of a twenty-two-item Likert-type scale, with each item having five possible responses (from 1 *very untrue of me* to 5 *very true of me*). The ZTPI is a multidimensional scale originally created to contain three subscales (Past, Present, and Future). In our study, based on the results published by D'Alessio and colleagues [44], we used only the Future Time Perspective and Present Time Perspective scales. Several reviews of time perspective instruments have found the ZTPI to be a valid and reliable measure. The Italian version of the scale has good psychometric properties (the internal reliability of the ZTPI ranges from 0.74 to 0.84) and a convergent validity with different measures of well-being [44]. In the present study alpha was 0.81.

*Resilience* was measured through the Italian version [43] of Campbell-Sills and Stein scale because it is considered to be more suitable to detect the construct with particular reference to work and organizational contexts. The resilience was detected through ten items (for example, "I am not easily discouraged by work failure") on a 6-point Likert scale from 1 (*strongly disagree*) to 6 (*strongly agree*). In the present study alpha was 0.88.

*Performance* was measured by two items, adapted to this study (which refers to the last three months in the Therapeutic Community), developed by Falco, Girardi, Kravina, Trifiletti, Bartolucci, Capozza and De Carlo [45], the former designed to measure perceptions of the extent, expressed as a percentage, in which participants thought they had achieved the objectives in working, and the latter designed to measure how they evaluated their performance at work, on a Likert scale from 1 (*very negative*) to 10 (*very positive*). Moreover, the performance of each worker with pathological addiction was assessed by the reference supervisor through the two items. In the present study alpha was 0.82.

### 3. Statistical analysis

In this study the relationship between social support, sense of community, work engagement, resilience, hope, future time perspective, and performance at work were analyzed.

In order to do so, structural equation models with observed variables (path analysis) were estimated using LISREL 8.80 [46].

For the first model (M1), all the direct and indirect effects of  $x \rightarrow y$  and all the correlations between variables  $x$  and variables  $y$  were evaluated.

A strategy of exclusion, the listwise, was employed for the preliminary handling of missing data [47]; the listwise deletion (LD) being one of the most commonly used methods to manage incomplete information [48].

In order to test the statistical significance of indirect effects (i.e., mediation), the Sobel Test [49] was utilized.

An alternative model (M2), in which the nonsignificant paths were fixed to zero, was estimated to obtain a more parsimonious solution for the data.

To evaluate the goodness-of-fit of the model to the data, the  $\chi^2$  test, the CFI (Comparative Fit Index), and the SRMR (Standardized RMR) [50] were mainly considered.

In addition to the  $\chi^2$  test, which is sensitive to sample size, the adoption of a two-index presentation strategy is a more advisable criteria than the presentation of a single index [50, 51].

The RMSEA (Root Mean Square Error of Approximation), NNFI (Nonnormed Fit Index), GFI (Goodness of Fit Index), AGFI (Adjusted Goodness of Fit Index) indices [51] were evaluated as well.

The cut-off criteria considered were:  $<0.08$  for SRMR and  $\geq 0.95$  for CFI for a good fit [50].

Moreover  $0 \leq \text{RMSEA} \leq 0.05$ ;  $0.97 \leq \text{NNFI} \leq 1.00$ ;  $0.95 \leq \text{GFI} \leq 1$ ; and  $0.90 \leq \text{AGFI} \leq 1$ , respectively, for a good fit.

Furthermore, using SPSS 21, the correlation between the index of performance perceived by the users and that evaluated by the reference supervisor was considered.

### 4. Results

The descriptive statistics and the internal consistency for each variable evaluated are shown in Table 1, wherein are also reported the correlations between all constructs considered in this study.

Regarding the M1 model, all the direct and indirect effects of  $x \rightarrow y$  and all the correlations between variables  $x$  and variables  $y$  were evaluated; a complete saturated model with zero degrees of freedom was tested.

Both social support and sense of community show a significant positive indirect effect on resilience, hope, future time perspective, and performance.

In order to test the statistical significance of the indirect effects (i.e., mediation) the Sobel Test has been used.

Social support shows a significant positive indirect effect ( $z = 2.208, p = 0.0272$ ) on resilience, ( $z = 2.226, p = 0.0260$ ) on hope, ( $z = 2.135, p = 0.0328$ ) on future time perspective, and ( $z = 2.137, p = 0.0326$ ) on performance.

Sense of community shows a significant and positive indirect effect ( $z = 2.906, p = 0.0037$ ) on resilience, ( $z = 2.948, p = 0.0032$ ) on hope, ( $z = 2.746, p = 0.0060$ ) on future time perspective, and ( $z = 2.751, p = 0.0059$ ) on performance.

Therefore, the mediation has been tested and confirmed.

Work engagement mediates the relationship between social support and resilience, hope, future time perspective, performance, as well as the relationship between sense of community and resilience, hope, future time perspective, performance.

To obtain a more parsimonious solution for the data, an alternative model (M2), in which the nonsignificant paths were fixed to zero, has been estimated.

The fit indices show a good fit of the model (M2) to the data:  $\chi^2 (7, N = 98) = 3.69, p = 0.814$ ; RMSEA = 0.00; CFI = 1.00; SRMR = 0.03; NNFI = 1.03; GFI = 0.99; AGFI = 0.96. The model is represented in Fig. 1.

The M2 model presents results in line with the M1 model.

Results indicate that social support has a direct effect ( $\gamma = 0.31, p < 0.001$ ) on hope and ( $\gamma = 0.20, p < 0.01$ ) on resilience. Sense of community has a direct effect ( $\gamma = 0.21, p < 0.01$ ) on resilience.

Social support and sense of community have a positive effect on work engagement – ( $\gamma = 0.23, p < 0.05$ ) and ( $\gamma = 0.32, p < 0.01$ ) respectively. Work

Table 1  
Means, standard deviations, and bivariate correlations among the constructs considered ( $N = 98$ )

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Social support	4.80	1.51	(0.89)						
2. Sense of community	4.35	1.81	0.268**	(0.62)					
3. Work engagement	4.07	1.75	0.316**	0.385**	(0.96)				
4. Hope	4.66	0.99	0.510**	0.246*	0.595**	(0.84)			
5. Future time perspective	3.61	0.75	0.248*	0.157	0.482**	0.663**	(0.81)		
6. Performance	6.45	2.40	0.168	0.287**	0.502**	0.302**	0.296**	(0.82)	
7. Resilience	4.43	1.00	0.427**	0.442**	0.617**	0.728**	0.506**	0.451**	(0.88)

Cronbach's alphas are shown in brackets. \* $p < 0.05$ ; \*\* $p < 0.01$ .

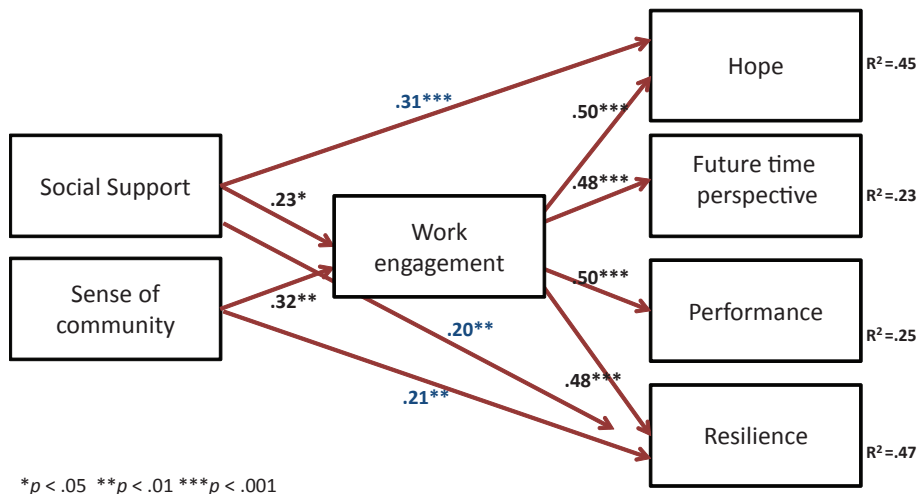


Fig. 1. Model of Work engagement, Social Support, Sense of community, Hope, Future time perspective, Performance and Resilience.

engagement, in its turn, is positively linked to resilience ( $\beta=0.48$ ,  $p<0.001$ ), hope ( $\beta=0.50$ ,  $p<0.001$ ), future time perspective ( $\beta=0.48$ ,  $p<0.001$ ), and performance ( $\beta=0.50$ ,  $p<0.001$ ).

Therefore, social support and sense of community show a positive and significant indirect effect on resilience, hope, future time perspective, and performance.

The Sobel Test was used in order to test the statistical significance of indirect effects (i.e., mediation).

Social support shows a positive and significant indirect effect ( $z=2.220$ ,  $p=0.0264$ ) on resilience, ( $z=2.247$ ,  $p=0.0246$ ) on hope, ( $z=2.190$ ,  $p=0.0285$ ) on future time perspective, and ( $z=2.209$ ,  $p=0.0272$ ) on performance.

Similarly, sense of community presents a positive and significant indirect effect ( $z=2.935$ ,  $p=0.0033$ ) on resilience, ( $z=2.997$ ,  $p=0.0027$ ) on hope, ( $z=2.865$ ,  $p=0.0042$ ) on future time perspective, and ( $z=2.910$ ,  $p=0.0036$ ) on performance.

Work engagement mediates the relation between social support and resilience, hope, future time perspective, performance as well as the relation between sense of community and resilience, hope, future time perspective, performance.

Hence the mediation has been confirmed and turns out to be partial because important direct effects have been observed between social support, hope, and resilience, as well as between sense of community and resilience.

Furthermore, using SPSS 21 a correlation between the index of performance perceived by the users and that evaluated by the reference supervisor was carried out.

Moreover, a statistically significant correlation ( $r=0.388$ ,  $p<0.01$ ) between self-evaluations by the users and etero-evaluations by the supervisors has been observed.

## 5. Discussion

This study analyzes the relationship between social support from the supervisor, sense of community, and a set of important factors that could facilitate the recovery process for people with drug and alcohol addiction. More specifically, we were interested in finding evidence to prove that the quality of the relationship that the supervisor establishes with these clients, and a supportive workplace, such as TCs, may be related to vocational aspects of work (i.e. performance) but also to various dimensions of

non-vocational outcomes (i.e. psychological capital and FTP) capable of improving the recovery process.

Our results indicate that both social support from supervisors and the perception of being part of a community play an important role in the recovery phase where people are placed in work paths. As expected, and in line with the reference literature, both social support by supervisor [20, 21] and the feeling of belonging to a work “community” show a direct relationship with some protective outcomes considered in this study. Specifically, results show a direct relationship between social support by supervisor and participants’ hope and resilience. With regard to the sense of belonging to the community, an analogous relationship with resilience is observed. Apparently high-quality relationships providing a context for social bonding in which it is possible to share a new sense of life and a deep commitment to change create the opportunity to transition from the experience of pain to the experience of hope, and allow the development of stress-coping strategies, such as resiliency. As the literature points out, resiliency appears to be a construct with considerable relevance for the recovery of multi-problem, chronic substance abusers [34, 35] precisely because it allows them to recognize their need for flexibility, adaptation, and even improvisation in situations predominantly characterized by change and uncertainty, and to move beyond present success and failure. Resilience uniquely derives meaning despite circumstances that do not lend themselves to planning, preparation, rationalization, or logical interpretation. Perhaps, the most interesting result in our study is the role played by work engagement as a partial mediator of the relations between distal factors, positive attitudes, and job performance. Specifically, the framework of our study is grounded in the idea that distal antecedents such as job characteristics (social support) and individual variables (sense of community) influence proximal motivational factors in order to affect not only job performance, but also some specific positive attitudes.

As expected, contextual and personal factors have a positive relation to individuals’ investment of their selves in their work roles and this, in turn, promotes higher levels of positive emotions and performance.

Our findings suggest that clients employed in an occupation are likely to perform extra-role behaviors, perhaps because they are able to “free up” resources by accomplishing goals and performing tasks efficiently. Significantly, the measurement of performance was achieved not only through a



self-assessment by the research participants but also through a hetero-evaluation by the supervisors using the same scale demonstrating a positive correlation between the two measures.

In other words, results show that clients receiving autonomy support from supervisors and perceiving sense of community become more inspired in their work, more engrossed in their working tasks, and more positive in their attitudes. The positive relationship with the supervisor and the feeling of belonging to the community during work experience are closely related to work engagement by people that are included in work programs in the last phase of the recovery process in the therapeutic community and this, in turn, is accompanied by reclaiming positive dimensions essential to prevent relapse. Demosthenes said "*Small opportunities are often the beginning of great enterprises*", thus regaining hope, resilience, and being able to imagine a new and different future thanks to favorable work experiences becomes an opportunity to face a great challenge.

The literature in this field has highlighted improvements in social function, improvements in employment, and social relationships are related to prevention of relapse [4]; however, to our knowledge, no studies have investigated the effect of social support, sense of community, and work engagement on positive attitudes during the recovery process from drug addiction.

There is a lack of attention to the influence of employment on treatment outcomes although researchers often refer to vocational rehabilitation, a component of the treatment, as if it were commonplace and a given.

Some authors have highlighted the positive role of work in preventing relapse in drug users [8], and they have also reported change in employment as a result of treatment but not as an effect on outcome of vocational training or employment during treatment. Our study has pointed out how social and personal resources, provided in a work context, may facilitate a recovery process that helps individuals fight against the reemergence of substance use and abuse.

### 5.1. *Implications of findings*

From the results, it is clear that in the context of a process of recovery based on work, significant positive consequences may be obtained in both performance and personal growth in the important dimensions of hope and perspectives for the future, as well as the ability to manage difficulties. This

reinforces, on the application level, the need to train supervisors to go beyond performance, important though it may be, and to fully exploit their clients' confidence and autonomy through social support and sense of community from which derives the strengthening of important personal resources for resilience and hope.

There is a need for those specialized in work psychology to put forward a constant effort of awareness and support geared to supervisors in order to promote social support and sense of belonging in the pursuit of effective paths to recovery.

Working on antecedent individual characteristics is useful to obtain positive results in the outcome variables, among which, resilience and future time perspective in addition to individual variables such as hope have particular relevance assumed by the professional and organizational variable performance. Indeed the perception of being competent, able to achieve an objective, and sharing some purposes with other people, are important factors of support for both the person but also (and especially) for the hosting work environment.

Offering a theoretical framework in guiding intervention can: (a) highlight the treatment process so it can be improved; (b) identify some basic principles and methods for TCs; (c) provide an alternative approach to the oral tradition typical of TC; (d) provide a common framework for training both professional and paraprofessional TC staff so they can pursue a united approach to treatment; and (e) help correct misperceptions of the TC as an unconventional, unsafe alternative treatment approach [3].

### 5.2. *Limitations*

This study presents some limitations. The difficulty in recruiting participants for this study accounts for the limited group size. The cross-sectional nature of the study did not allow conclusions about causality and, therefore, a longitudinal study is needed to clarify the relationship between social support from supervisor, sense of community, and vocational/non-vocational outcomes. The use of self-reported measures to detect both independent and dependent variables may result in biased (usually inflated) correlations between variables (common method bias, CMB); therefore, the observer rating (e.g., psychologist's or psychotherapist's assessment of identity/perceived personal health) may be used together with self-report measures in order to reduce CMB. Finally, the present study should be viewed

as hypothesis generating; more research is needed in order to validate our descriptive model.

### Conflict of interest

All the authors declare they have no conflicts of interest.

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