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# Self-Efficacy in Social Work: Development and Initial Validation of the Self-Efficacy Scale for Social Workers

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**Abstract:** Self-efficacy beliefs do not reflect a generic sense of competence, but are instead context-specific. Therefore, self-efficacy should be assessed by using an *ad hoc* scale measuring individual behaviors that allows social workers to exercise influence over events that affect their work life. The present study describes the development and initial validation of the self-efficacy scale for social workers (SESSW). Items were generated through the Critical Incident Technique. Sixteen social workers with at least 10 years of service participated in two focus groups; they were asked to recall critical incidents in their work and to indicate the most effective behaviors to manage the incidents. Content analysis of the focus group transcripts provided 13 key self-efficacy beliefs. The 13-item scale was validated with a sample of 805 social workers. Data were analyzed using a split-sample technique. Exploratory factor analysis on the first split sample (n = 402) revealed three dimensions of self-efficacy, corresponding to emotion regulation, support request, and procedural self-efficacy. The three-factor structure of the scale was further confirmed with confirmatory factor analysis on the second split sample (n = 403). Our results show that SESSW is an adequate instrument for assessment of self-efficacy beliefs in social work.

**Keywords:** self-efficacy; social work; scale validation; exploratory factor analysis; confirmatory factor analysis

#### **Abbreviations**

SESSW: Self-Efficacy Scale for Social Workers; EFA: Exploratory Factor Analysis; CFA: Confirmatory Factor Analysis; CIT: Critical Incident Technique; KMO: Kaiser-Meyer-Olkin; CFI: Comparative Fit Index; SRMR: Standardized Root Mean Square Residual; RMSEA: Root Mean Square Error of Approximation; AIC: Akaike information criterion.

#### 1. Introduction

# 1.1. Self-Efficacy

Bandura ([1], p. 391) offered a formal definition of self-efficacy: "Perceived self-efficacy is defined as people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performance". Perceived self-efficacy is therefore a belief about one's capabilities to succeed in specific situations [2]. It is an individual assessment of one's ability to execute specific skills under particular circumstances, and thereby to achieve a successful outcome. Expectations of personal efficacy are distinguished from outcome expectancies, because individuals can believe that a course of action will produce a certain outcome, but if they believe themselves to be unable to perform the required behavior, it is unlikely that the behavior will be started or will persist in the face of obstacles or aversive experiences. It is important to note that perceived self-efficacy is a belief about what a person can do rather than an evaluation of one's physical and personality attributes [3,4]. This means that self-efficacy is a context-specific construct rather than a general trait [5], that is, it does not manifest uniformly across activity domains and situational conditions, but varies across tasks and contexts.

Personal self-efficacy is a product of the interactions among personal factors (e.g., cognitions, emotions), behaviors, social and environmental conditions [6]. Specifically, Bandura [2,5,7] identifies four sources of self-efficacy beliefs. First, people develop beliefs in their efficacy through mastery experiences. Individuals who learn how to overcome difficulties and exert perseverant effort will develop a resilient self-efficacy; on the contrary, individuals who experience only success will be easily discouraged when facing failures. Second, efficacy expectations can be formed through social modeling. Observing others similar to the self that succeeds by perseverant effort increases one's perceived self-efficacy. Third, self-efficacy can be the product of social persuasion, that is, individuals who are persuaded to believe in their capabilities will persist in the face of obstacles. Fourth, self-efficacy judgments in part rely on individual physical and emotional states; in particular, high levels of physiological arousal are associated with low efficacy expectations.

Perceived self-efficacy influences the quality of human functioning in multiple ways [5]. It guides human behavior through cognitive, motivational, affective and decisional processes. Personal self-efficacy determines whether individuals think erratically or strategically, pessimistically or optimistically, in self-enabling or self-debilitating ways, and influences causal attributions for successes and failures.

Efficacy expectations affect how individuals approach goals, tasks, and challenges. People's belief in their efficacy plays a major role in goal setting. Cleary and Zimmerman [8], for instance, found that individuals who were high in self-confidence were likely to set more specific goals, whereas individuals who were low in self-confidence were likely to set more vague goals. This can affect goal

achievement, as setting specific goals allows a more effective evaluation of one's progresses [4]. Self-efficacy beliefs also influence the way people motivate themselves and persevere in the face of difficulties in achieving their goals, and also their resilience to adversity [9]. Bandura [2] also states that people motivate themselves to attain some goal if they are more likely to believe in their capabilities to attain that goal. Motivational effects derive from the fact that people are apt to make and maintain a strong commitment to attempt a task if they think they are able to accomplish it, strive to do their best and persist in achieving a goal. For this reason, high levels of self-efficacy sustain motivation and improve skills development [9–12]. Moreover, people with a strong sense of personal efficacy increase their efforts in the face of failure, more easily recover their confidence after failures, and attribute it to insufficient effort or deficient knowledge and skills which they believe they are able to acquire [9]. Individuals with high-perceived self-efficacy are also more likely to view difficult tasks as something to be mastered rather than something to be avoided. They set themselves challenging goals and maintain a strong commitment to them.

Perceived self-efficacy shapes people's emotions. Several studies prove that people's confidence in one's capability affects emotional reactions and vulnerability to stress. Individuals with low self-efficacy feel anxiety, fear and apprehension, and these emotions, in turn, influence their cognitive processes, as well as their perseverance and determination to accomplish the task [7,13–17]. Low self-efficacy can also be associated with feelings of depression and helplessness [7], and it is regarded as a source of stress at work [18].

Expectations of efficacy also play a major role in decision-making processes [19], thus affecting people's lives, what they do and what they will become. Self-efficacy beliefs influence the options that people consider and the choices they make [5]. People with low self-efficacy judge themselves as incapable of coping with change processes, and they will tend to dwell on personal deficiencies and the difficulty of the change [20,21]. Such worry creates stress and diverts people's focus from the strategies to be successful to the demands of the situation that appear as hardly insuperable [19].

In general, several meta-analysis have confirmed the influential role of perceived self-efficacy in human performance and outcomes [22–27]. In a meta-analysis on 114 studies, Stajkovic and Luthans [27] examined the relationship between self-efficacy and work-related performance. They found that that self-efficacy is a significant predictor of performance at different levels of task complexity (low, medium, and high).

Several studies in different professions indicate that self-efficacy is related to a number of work-related variables. For instance, perceived self-efficacy serves as a buffer against thoughts about quitting the job or turnover intentions (e.g., [28–30]). Moreover it is positively related to job satisfaction and negatively related to burnout [31–35].

#### 1.2. Social Work

The International Association of the Schools of Social Work and the International Federation of Social Workers define the social worker as a professional that promotes social change, problem solving in human relationships and the empowerment and liberation of people to enhance well-being. Utilizing theories of human behavior and social systems, social work intervenes at the points where people interact with their environments. Social workers identify the most appropriate way to assist and

help people who are no longer able to handle, independently and consciously, the difficult situations that arise in their daily lives. In social logic, "assist" means to accompany and support people in particular situations in which the usual ways of coping with difficulties are placed in crisis, are ineffective or the occurrence of new events are problematic. The assistance is always in support of the relational dimension, and considers the person-environment interaction as a single entity.

Social work has its roots in the Charity Organization Society, founded in England in the late 19<sup>th</sup> century with the aim of ameliorating the problems of poverty caused by rapid industrialization. This model was soon replicated in the United States.

In Italy, the birth of social work as a profession is traced back to 1945, when the first two schools for social workers were founded (almost simultaneously) in Milan and in Rome. The profession was enshrined in Italian law only in 1993. Social workers are defined as professionals working with technical and professional autonomy in all phases of their intervention for the prevention, support and recovery of individuals, families, groups and communities in situations of need and hardship.

In Italy, social workers can be employed in the basic social service or in other specific services (e.g., child protection, mental health). The basic social service offers help and support to individuals, families, groups, and every social gathering in a specific geographical area (e.g., municipality). The main tasks of social workers in the basic service are: (1) To identify the user's needs; (2) Organize and manage packages of support; (3) Cooperate with and refer to other agencies and/or professional figures. The basic social service is coordinated and integrated with assistance from specialist services and with a network of social, educational, health and welfare services, in collaboration with other professionals such as psychologists, educators, doctors and lawyers. Specialist services are delegated to interventions such as academic, work and social inclusion, social re-integration, in addition to the traditional activities of prevention, treatment and rehabilitation [36].

## 1.3. Self-Efficacy Scales in Social Work

A number of tools have been developed to measure self-efficacy in social work settings. Betz's [37] measurement package, for instance, assesses self-efficacy regarding educational requirements and job duties in social work. However, the study aimed at contrasting self-efficacy perceptions of females and males in relation to traditional and nontraditional careers for women; as a result, self-efficacy was not assessed in relation to specific professional tasks.

The Hospital Social Work Self-Efficacy scale was proposed by Holden and colleagues [38] in order to measure social workers' confidence in their ability to perform specific social work tasks. Yet, the scale measures self-efficacy in a specific practice setting—social work in hospitals—thus making it difficult to generalize the results to other settings. The generalization was further limited by the fact that the Hospital Social Work Self-Efficacy scale was developed and validated with master's level social work students, even though, in a replication study [39], evidence for the validity and reliability of this scale was found by examining both social work students and professional social workers.

More recently, the Social Work Self Efficacy scale [40] has been used to assess self-efficacy beliefs regarding social work practice in general. Items for this scale were in part originated by experts in social work education, who were asked to list important skills that students are expected to achieve at the end of their studies, and in part taken from the Practice Skills Inventory [41], which was developed

on the basis of a review of the existing literature on psychotherapy and social work. The items included in the scale, therefore, might not assess self-efficacy beliefs that are relevant to professional social workers.

To overcome these limits, in this study we aimed to develop and validate a scale assessing self-efficacy in relation to specific tasks that professional social workers consider critical for their work. To this aim, the two phases of development and validation of the scale involved a sample of professional social workers employed in different practice settings.

## 1.4. Basics to the Construction of Self-Efficacy Scales

Bandura [5] has recently underlined that some scales fail to capture efficacy beliefs. "Self-efficacy is concerned with people's beliefs in their capability to produce given attainments. All too often, this belief system is treated as though it is a generalized trait" ([5], p. 15). Efficacy beliefs are not a static trait, but rather dynamic constructs that can be enhanced through mastery experiences and learning [7]. As mentioned in the previous section, self-efficacy beliefs do not reflect a generic sense of competence or self-esteem, but are instead context-specific, moreover people differ in their efficacy, not only across different domains of functioning but even across various facets within an activity domain. Consequently, there is no single all-purpose measure of perceived self-efficacy, but it is necessary to derive specific scales for specific situations [42].

Bandura further notes, "strength of self-efficacy is measured across a wide range of performance within an activity domain" ([5], p.17). In fact, social workers' sense of efficacy may differ across the different tasks that they are required to perform [7]. For this reason the construction of a valid self-efficacy scale, requires sound conceptual specification of the determinants governing performance in a given domain of functioning and the impediments to realizing desired attainments [42]. To construct a self-efficacy scale is therefore necessary to rely on a good conceptual analysis of the relevant domain of functioning, since this knowledge specifies which aspects of personal efficacy should be measured.

Self-efficacy appraisals reflect the levels of difficulty, the gradations of challenges or the impediments to successful performance, which individuals believe they can surmount. Indeed, Bandura [7,42] points out that perceived efficacy represents the faculty to complete a task, overcoming the difficulties that people encounter. To construct a self-efficacy scale it is necessary to preliminarily identify the types of challenges and impediments that individuals are likely to face. Moreover, a sufficient degree of difficulty should be built in the items to avoid ceiling effects. In the case of perceived self-regulatory efficacy to maintain a good level of functioning (e.g., being a good social worker) over time, individuals should evaluate their confidence in their ability to perform certain tasks regularly. For these reasons, the words "always" or "usually" are often included in self-efficacy items [43,44].

Finally, self-efficacy items should accurately reflect the construct. Self-efficacy is concerned with perceived capability; in particular perceived self-efficacy is a judgment of capability to execute given types of performances. Moreover, Bandura [42] argues for the need to assess capabilities, and not intentions, current ability, or outcome expectancies in the measurement of self-efficacy. I *can* is a

statement of efficacy. I will is a statement of intention. According to Bandura, statements of intention should not be included in a self-efficacy scale.

#### 2. Method

# 2.1. Development of the Self-Efficacy Scale for Social Workers (SESSW)

We developed a scale specific for social workers (SESSW), following Bandura's [5,42] guidelines for the development of self-efficacy scales. According to the theoretical references, SESSW assesses individual behaviors that allow social workers to exercise influence over events that affect their work life.

To identify the activity domain and the difficulties that social workers encounter every day in their work, we adopted the Critical Incident Technique [45]. By an incident it is meant that any event or situation that is recent, sufficiently complete and representative of one's work. An incident is critical when it makes a significant contribution to work and challenges one's abilities. This technique has been successfully applied to different domains (see, e.g., [45–48]; for reviews see [49]).

CIT was carried out into two focus groups, each involving eight social workers, selected on the basis of the following criteria: a. they operated in the province of Verona (Italy); b. had at least 10 years of service; c. were highly motivated to give a personal contribution to activities related to permanent education; d. had given written informed consent to participate in the study. Each session was divided into two stages, both of which adopted semi-structured interviews. At stage 1, participants were asked to individually recall the critical incidents that have been occurring most frequently in their work. They were invited to provide details about the events, problems, and context of the incident, as well as the behaviors they engaged in to face the critical situation. At stage 2, each participant shared the critical incidents recalled and, through open discussion, participants identified the behaviors they found most effective to manage the incidents. The transcripts of the two focus groups were submitted to a content analysis (with Nvivo 8), which provided 13 key beliefs of self-efficacy, which were used to develop a corresponding number of items (see Table 1). The social workers that participated in the focus groups evaluated the correspondence between the 13 items and CIT results, as well as the level of item difficulty. All the items were judged in consistency with CIT results and were easy to understand.

Considering that self-efficacy is a judgment of capability to execute a task, SESSW items are phrased so that social workers are instructed to rate their agreement with a statement of certainty that they can accomplish those tasks and that they can do this regularly (e.g., I am always able to fulfill my commitments to the user).

Finally, SESSW items were pretested for timing and comprehension and reviewed by a social science methodologist not otherwise involved with the project. We discarded those items that were ambiguous or rephrased them.

**Table 1.** Item loadings of exploratory factor analysis (EFA).

Items	Factor 1 Emotion regulation	Factor 2 Procedural self-efficacy	Factor 3 Support request
1. I always manage to keep my anxiety			
levels within certain levels when dealing with serious situations	0.76	0.26	0.18
2. I am always able to avoid being burdened with the user's problems that I cannot resolve	0.74	0.16	0.16
3. When dealing with complex situations, I am always able to recognize the limits of my competencies	0.59	0.36	0.16
4. I am always able to manage the powerlessness I sometimes feel when dealing with difficult situations	0.54	0.30	0.13
5. I am always able to fulfil my commitments to the user	0.14	0.67	0.24
6. I am always able to refrain from making any type of personal judgment in my relations with the user	0.21	0.57	0.24
7. When faced with failure, I am always able to redefine objectives and start again from the beginning	0.31	0.48	0.24
8. I am always able to establish a friendly, sympathetic relation with the user	0.23	0.45	0.06
9. I always manage to find enough time to write and update case reports	0.21	0.41	0.12
10. I am always able to look for and find support from people in other professions	0.11	0.11	0.98
11. When dealing with complex cases I am always able to involve people and services from different professions	0.18	0.29	0.56
12. I am always able to immediately convey to my colleagues my need for support	0.22	0.25	0.51
13. I always manage to immediately inform/share with my superiors any problems that may arise	0.32	0.32	0.26

Note: Loadings above 0.30 are in bold. EFA was conducted on the first-split sample (n = 402).

# 2.2. Validation of SESSW: Participants and Procedure

Eight-hundred and five social workers (Mean age = 38.45 years; SD = 9.73, range = 23-71; 92.7% females) employed in different services in the region of Veneto (Italy) participated in the study for the validation of SESSW. They were members of the regional professional association and have been working as social workers for at least one year. The average length of service was 12.27 (SD = 9.42).

The gender of our sample was predominantly female (92.7%) and this reflected the gender composition of the association (92.8% females). Most participants were employed in the public sector (78.4%); the remaining worked in the private sector (17%) or as freelance professionals (2.9%); 1.7% were missing. The employment contract is for the 84.9% an open-ended contract, and for the 15.1% a fixed term contract. Participants belong to different working environments with a prevalence of the Municipality (41.3%), Health Units and Hospital (33.3%), Nursing Home (8.6%), Social Cooperative (6.0%) and other sectors (10.8%).

The basic social service is the prevailing employment professional sector (41.9%), followed by residential services for the elderly (12.8%), disability (6.7%), family counseling (6.5%), drug addiction (5.1%), psychiatric (3.3%), developmental age social service (3.1%), and other services (20.6%).

The research was presented as a survey on professional skills and well-being at work. An online-questionnaire was sent by email to 1,609 social workers (response rate = 50.16%), who completed the survey during work hours. The confidentiality and anonymity of responses was guaranteed.

Participants answered the 13 items of self-efficacy (see Table 1) on a 7-point Likert scale, anchored by completely disagree (1) and completely agree (7).

## 3. Findings

A split-sample technique was used for data analysis (see [50,51]). The sample was randomly divided into two samples of similar size. The first split sample (n = 402) was used to conduct exploratory factor analysis (EFA). Data from the second split sample (n = 403) were used to compute reliabilities and to conduct confirmatory factor analysis (CFA) with LISREL 8.7 [52].

Exploratory factor analysis (EFA) was applied to initially identify the factor structure of self-efficacy. To determine the appropriateness of factor analysis, we examined the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and the Bartlett's test of sphericity. According to Tabachnick and Fidell [53], KMO should be 0.60 or above, and the chi-square value of Bartlett's test should be significant. Both indices confirmed the adequacy of the sample: KMO = 0.86;  $\gamma$ 2Barlett(78) = 1785.37. p < 0.001. The 13 items were analyzed adopting the maximum likelihood method with Varimax rotation. To select the numbers of factors, we used a criterion in which eigenvalues were greater than 1.0 [54] and Cattell's [55] scree test. Three factors with an eigenvalue higher than 1 were extracted (Table 1); the scree test confirmed this result. The three dimensions explained 46.77% of variance; they were labeled emotion regulation, procedural self-efficacy, and support request. Item 13 (see Table 1) showed loadings of similar size (two of which > 0.30) on all three factors and was therefore eliminated from subsequent analyses. Two more items showed cross-loadings higher than 0.30 (item 3 and item 7). According to Barbaranelli [56], if one item loads on two factors and the ratio between the two loadings is lower than 2, it cannot be considered a pure marker of its primary factor, yet it can be retained if the ratio is not lower than 1.5. The ratio values for item 3 and 7 were, respectively, 1.64 and 1.55. Item 3 was therefore retained as an indicator of emotion regulation and item 7 as indicator of procedural self-efficacy. Item 11 showed a cross-loading on procedural self-efficacy, which was very close to 0.30. However, the ratio value for this item was 1.93 and it was therefore retained as an indicator of support request. Emotion regulation accounted for 17.16%, procedural self-efficacy for 15.01%, support request for 14.60% of the total variance. Emotion regulation refers to social workers' confidence in one's ability to manage negative emotions that arise when dealing with complex cases/situations; procedural self-efficacy concerns the ability to deal with different aspects of the social work practice, such as establishing a fair and kind relationship with the user, writing and updating case reports, and not giving up in the face of failure; support request refers to confidence in the ability to look for and find support in others (e.g., other professionals, superiors and colleagues).

The reliability of each dimension was computed on the second split sample. As a measure of reliability, the internal consistency was examined by computing Cronbach's alphas for the three

dimensions. Cronbach's alpha assesses the degree of inter-item correlation and a value larger than 0.70 is considered satisfactory [57]. Cronbach's alphas were 0.81 for emotion regulation, 0.76 for procedural self-efficacy, and 0.80 for support request.

CFA was also conducted on the second split sample to test the three-factor structure obtained with EFA. The goodness-of-fit of the model was evaluated with the  $\chi^2$  test. A model fits the data well when  $\chi^2$  is nonsignificant. Three additional goodness-of-fit indices were used: the comparative fit index (CFI; [58]), the standardized root mean squared residual (SRMR; [59]), and the root mean square error of approximation (RMSEA; [60]). Hu and Bentler [61] suggested that the fit is satisfactory when CFI is equal to or above 0.95, SRMR is 0.08 or below and RMSEA is 0.06 or below. However, it should be noted that these cutoff values can lead to erroneous results, as factor loadings in social sciences are typically lower than those in the Hu and Bentler's study [62]. Some researchers (e.g., [63]) even suggest that these values should not be used as cutoffs for an acceptable model fit or not, but rather as subjective guidelines. In addition, the Akaike information criterion (AIC) was used to compare the three-factor model with alternative models. Values of AIC closer to zero indicate a better model fit [64]. The analyses were performed on covariance matrices, since SEM statistical theory relies on the distributional properties of the elements of a covariance matrix [65]. We used the maximum likelihood estimation method. To identify the model, the first loading of each factor was fixed to 1.

The three-factor model showed an acceptable fit:  $\chi^2(51) = 212.02$ ,  $p \approx 0.00$ ; CFI = 0.96; SRMR = 0.056; RMSEA = 0.09 [0.06,0.10]. Item loadings were all significant (p < 0.001) and higher than 0.47 (see Figure 1). Correlations between latent factors ranged from 0.58 (emotion regulation and support request) to 0.79 (emotion regulation and procedural self-efficacy), ps < 0.001. For each correlation, we computed a 95% confidence interval, by considering two standard errors above and two standard errors below the correlation; none of these intervals included the perfect correlation |1.00| and this suggests that the three factors are distinct constructs. We further tested the distinction between the three constructs by applying the chi-square difference test [66]. The model with three factors was compared with three nested models (see [67–69]). In the first, we fixed the correlation between emotion regulation and procedural self-efficacy to 1, and constrained the two factors to have equal correlations with request support. In the second and third model, the same procedure was applied to procedural self-efficacy and request support, and to emotion regulation and request support, respectively. All the chi-square differences were significant,  $\chi^2_{\rm d}(2) \geq 76.78$ , p < 0.001, further suggesting that the three factors are distinct constructs.

We also tested two alternative models (see Table 2): a two-factor model and a one-factor model. In the two-factor model, items of support request loaded on the first latent variable and items of emotion regulation and procedural self-efficacy loaded on the second latent variable. In the one-factor model, all items loaded on the same latent variable. AIC values suggest that the three-factor structure represents the best model, although fit indices for the two-factor structure were very close to acceptable fit. This result provides additional support for the distinction in the three dimensions of emotion regulation, procedural self-efficacy, and support request.

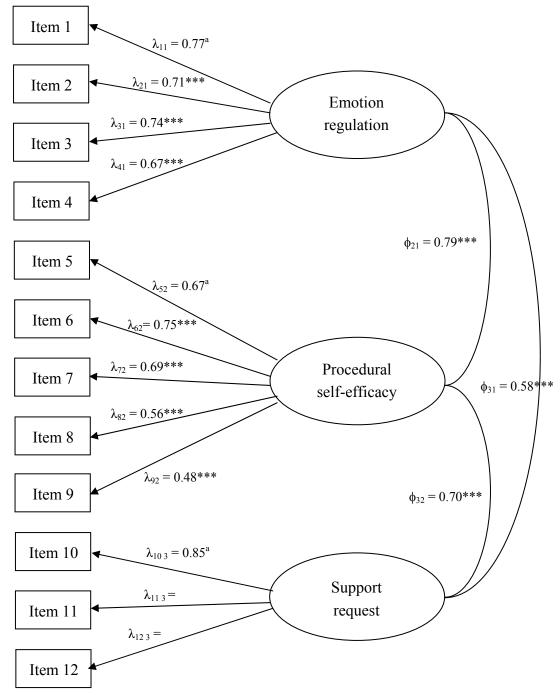


Figure 1. The three factor structure of SESSW (confirmatory factor analysis; CFA).

Note: CFA was conducted on the second-split sample (n = 403). Item 13 was not included in the model, since in the exploratory analysis it showed similar crossloadings on all the three factors. <sup>a</sup> fixed parameter. \*\*\* p < 0.001.

**Table 2.** Results of confirmatory factor analysis of model testing, second-split sample (n = 403).

Model	$\chi^2$	df	P	CFI	SRMR	RMSEA	AIC
3-factor model	212.02	51	$\cong 0.00$	0.96	0.056	0.09 [0.07,0.10]	270.56
2-factor model	288.80	53	$\cong 0.00$	0.94	0.065	0.11 [0.10,0.12]	368.55
1-factor model	612.47	55	$\cong 0.00$	0.87	0.170	0.15 [0.14,0.17]	631.63

Note: CFI = comparative fit index; SRMR = standardized root mean squared residual; RMSEA = root mean square error of approximation; AIC = Aiken information criterion.

We further tested the factorial validity of SESSW in participants with high and low experience as a social worker. We divided participants into two groups on the basis of their length of service, using the median split method. The three-factor structure was tested separately for each group using CFA. Fit indices for the two groups reported in Table 3. As can be seen, both groups presented an adequate fit; however, the high-experience group presented a slightly better model fit.

**Table 3.** Fit indices for the three-factor structure among social workers with high and low work experience, second-split sample (n = 403).

Group	$\chi^2$	df	P	CFI	SRMR	RMSEA
High-experience $(n = 164)$	116.13	51	$\cong 0.00$	0.97	0.053	0.08 [0.06,0.10]
Low-experience $(n = 182)$	132.36	51	$\cong 0.00$	0.95	0.068	0.09 [0.07,0.11]

Note: CFI = comparative fit index; SRMR = standardized root mean squared residual; RMSEA = root mean square error of approximation. The high-experience and low-experience groups were obtained using the median-split method. Fifty-seven participants were removed from this analysis: data from 37 participants were missing on length of service, and data from 20 participants were equal to the median.

Finally, we analyzed how the scale functions among high- versus low-experienced social workers. Descriptive statistics and alpha coefficients for these two groups are reported in Table 4. We hypothesized that social workers with high experience would report higher scores on each of the three dimensions of SESSW. Mean scores of the two groups were compared using the *t*-test for independent samples. As can be seen from the table, our hypothesis was only partially confirmed. Social workers with high experience exhibited greater self-efficacy on emotion regulation, t(344) = 1.96, p = 0.05, and support request, t(344) = 2.23, t=0.03, compared to social workers with low experience. No difference between the two groups was found for procedural self-efficacy, t=0.05, although the mean scores are in the expected direction.

**Table 4.** Descriptive statistics and reliability for social workers with high and low work experience, second-split sample (n = 403).

	Emotion regulation			Procedural self-efficacy			Support request		
Group	M	SD	α	M	SD	α	M	SD	α
High-experience $(n = 164)$	4.58	1.05	0.84	4.74	0.93	0.79	5.32	1.04	0.82
Low-experience $(n = 182)$	4.37	0.97	0.76	4.65	0.87	0.75	5.07	1.06	0.79

Note:  $\alpha$  = Cronbach's alpha. The high-experience and low-experience groups were obtained using the median-split method. Fifty-seven participants were removed from this analysis: data from 37 participants were missing on length of service, and data from 20 participants were equal to the median.

## 4. Discussion and Conclusions

This study reports the development and initial validation of a new measurement instrument to assess social workers' self-efficacy (SESSW). Self-efficacy is a construct with a great deal of theoretical and empirical support.

To create this scale, we explored the domain of functioning and the difficulties that social workers routinely encounter in achieving their tasks, adopting the Critical Incident Technique [43].

The initial validation of SESSW was based on data provided by 805 social workers employed in different services in the region of Veneto (Italy), using exploratory and confirmatory factor analysis.

The results of our study provide initial evidence that the psychometric properties of SESSW are adequate, and seem to suggest that the scale as a whole is an acceptable instrument to assess social workers' self-efficacy.

In this research construct, validity and internal consistency were examined. The exploratory and confirmatory factor analysis of the 13 items of the SESSW revealed a three-dimensional factor structure: emotional regulation, procedural self-efficacy, and support request. However, further examination of the factorial structure of SESSW is needed, as the fit indices obtained for the two-factor structure in this study were very close to acceptable fit. The factorial validity of the scale was also tested in social workers with high and low work experience. Results indicated an adequate fit of the three-factor structure in both groups. Moreover, the scale differentiated between social workers with high and low work experience, although the difference was significant for only two of the three dimensions (emotion regulation and support request).

The SESSW subscales appear to be internally reliable. The internal consistencies were above 0.75 for the three factors.

## 4.1. Limitations and Suggestions for Future Research

Using this scale it will be possible to establish social workers' level of self-efficacy. For this reason, we believe that SESSW will be a useful tool for interventions aimed at improving social workers' performance and well-being, and the service that they offer to users.

This study is the first step in developing the SESSW, so it is right to recognize some limitations, including the fact that we relied exclusively on self-reports, and that individuals may not necessarily be aware of their perceptions and thoughts or may respond in socially desirable ways.

A second limitation is that we did not test the discriminant and convergent validity of SESSW. Future studies should address this point and also verify the test-retest reliability of this measure. In order to test the predictive validity of SESSW, further research should also study and explore the relationship between scores on this scale and other important variables in social work, such as commitment to the profession, burnout and well-being.

A third limitation concerns the sample characteristics. The focus groups used to generate the scale items involved a relatively small number of people; a greater sample might have generated a wider set of items. Moreover, the great majority of participants were females and this might limit the generalizability of our results. However, it should be noted that gender disparities in the social work profession are present also outside Italy. Moreover, all participants were from the region of Veneto (North East of Italy). For the definitive establishment of the properties of SESSW, it is necessary to find support for its validity in another independent sample. We are currently testing the scale with social workers from other areas of Italy, however, following it will be necessary to adapt and validate the scale for other countries and cultures.

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#### **Conflicts of Interest**

The authors declare no conflict of interest.

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