

# Impact of Project Manager Competencies on Project Success: Case of Social Projects in the City of Agadir, Morocco

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**Abstract:** The question of project manager competencies and especially in social projects is a key issue for social organizations seeking to progress and achieve success. If the manager has an important role to play with regard to the social organization, he's however dependent on his behavioral, professional and personal capacities. The purpose of this paper is to show, on the basis of a quantitative study carried out among 120 managers of social projects in cooperatives located in the city of Agadir (Morocco), that the success of projects is conditioned by the leadership skills. Consequently, factors related to behavioral skills such as Solidarity; Involvement; Patience; Creativity; Empathy; Motivation; Trust; Commitment; Self-esteem; Transparency; Self-control; Discipline and other factors related to professional characteristics and personal characteristics of project managers prove a positive and significant relationship with the criterion of success studied.

**Key words:** project success; social project success; project managers competencies

**JEL codes:** J28, J35, M540

## 1. Introduction

The skills of project managers have long been a key factor of project success (Turner R. & Müller R., 2006; Zhang F. et al., 2013). During the period of 1950s, the first scientific research work dealing with the problem of lack of project managers competencies and the finding of key competencies were developed (Gaddis, 1959). Then the institutionalization of project management by specialized organizations and institutions (PMI-Project Management Institute, AFITEP-French Association of Project Management, IPMA-International Project Management Association, etc.), allowed other works to exist. These works looked at the standards and knowledge bases needed to develop a good technical profile of project managers. Numerous writings of project managers skills have been created at a high speed over the last twenty years. The authors dealt with different issues related the project management skills with the success of the projects (Slevin D. P. & Pinto J. K., 1987; 2007; Afitep-AFNOR, 1991; Briner W., Geddes M. & Hastings C., 1993; Courtot H., 1997; Boudès T., Charue-Duboc F. & Midler C., 1997; Abou-hafs H. & Bellihi H., 2013; Bellihi H. & Abou-hafs H., 2014; Liikamaa K., 2015;

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Dziekoński K., 2017; Torbjørn Bjorvatn T. & Wald A., 2018; Charbaji S., 2018; Abou-hafs H. & Fadila B., 2018). Two paradigms are concluded, the first one is Anglo-Saxon and the second one is Francophone. The difference between the two paradigms is that related to the behavioral skills of project managers. Indeed, the American paradigm defends the importance of techniques and procedures to ensure success of projects, while the French paradigm defends the idea of behavioral and ethical competencies of project manager. A combined literature review of the contribution of Anglo-Saxon and Francophone work indicates that the project success depends on the combination of technical, behavioral and contextual skills. That said “hard” skills and “soft” skills (Slevin D. P., & Pinto J. K., 1987).

Moved to social projects, the concept of competencies is defined by the set of skills enabling the mobilization of resources and techniques in order to achieve social objectives under cost-time-quality constraints (Atkinson R., 1999). It is also indicated by the ability to mobilize, integrate and transfer knowledge, skills and resources to achieve social goals (Takey S. M. & Carvalho M. M., 2015). Despite the increasing number of scientific writings about the projects managers competencies and projects success, very few studies have focused on the issue of skills in social projects. Therefore, it seems necessary to study the relationship that can exist between the skills of managers and the social projects success. In other words, what is the impact of managers competencies on the social projects success? The purpose of this paper is to show, on the basis of a quantitative study carried out among 120 managers of social projects in cooperatives located in the city of Agadir (Morocco), that the success of projects is conditioned by the project manager competencies. Thus, factors related to behavioral skills such as Solidarity; Involvement; Patience; Creativity; Empathy; Motivation; Trust; Commitment; Self-esteem; Transparency; Self-control; Discipline and other factors related to professional characteristics and personal characteristics will be studied.

## **2. Social Project Managers Competencies**

The skills of social project managers will be examined from a literature review related to conventional project management. The skills-success impact relationship will be analyzed through components including behavioral skills and technical skills.

### **2.1 The Needed Competencies of Social Project Success**

Extensively studied in the case of conventional projects, particularly those of new product development and construction project, the skills of managers is still today a topical issue in French and Anglo-Saxon scientific research focusing on projects success issues. The competency theory is based, more or less competencies and strategic value of the organization. The skills approach has its origin in the analysis of the Project Management Body of knowledge-PMBOK launched by the PMI (Hawkins J. & Dulewicz V., 2007) to designate all processes needed for good project team management. The concept of “skills” developed later by AFITEP to indicate components of the skills related to the organizational and strategic context of the project. The skills of the project manager are considered in a context of high uncertainty whose achievement of objectives requires good and specific management (Afitap-Afnor, 1991). This goes back to project characteristics and also to the human problems (Briner W., Geddes M. & Hastings C., 1993; Courtot H., 1997). It involves mobilizing actors who are sometimes unknown, leading teams, managing conflicts (Boudès T., Charue-Duboc F. & Midler C. 1997). As the last authors highlight, they are different skills needed to the control of management tools. The project managers behavior is one of the most important key success factors for Francophone literature (Bellih H. & Abou-hafs H.,

2013). Transposed to social projects, the concept of competencies is defined by the set of skills enabling the mobilization of resources and techniques in order to achieve social objectives under cost-time-quality constraints. It is also indicated by “ability to mobilize, integrate and transfer knowledge, skills and resources to reach or surpass the configured performance in work assignments, adding economic and social value to the organization and the individual” (Takey & Carvalho, 2015). The notion of competencies takes on different meaning. In social projects, as is the case for conventional projects, the project manager must be good in technical aspect of management and behavioral aspect of management. Other categories of skills have been advanced by eminent researchers in the field of project management such as piloting techniques, social competence, specific professional knowledge (Boudès T., Charue-Duboc F. & Midler C., 1997). International Competence Baseline-ICB (2006) cites technical skills, behavioral skills and contextual skills. Turner R. and Müller R. (2006) emphasizes three categories of competencies: emotional intelligence, intellectual skills and managerial skills. Although the processes and principles dictated by the PMI and the Anglo-Saxon organizations make it possible to clarify the path of success for project managers, they are however unsuitable for achieving its mission successfully in the case of high-risk projects such as social<sup>1</sup> projects. The contribution of French scientific literature was important for assessing the success of projects on the basis of strategic and behavioral factors. The behavioral competencies approach presents considerable advances in this perspective. This approach is based on the observation of the dynamics of organizations in its various aspects: human, technical, organizational and cultural. In the midst of change, the project management proves the continual need to adapt to contexts. The project manager must first understand the organizational behavior in order to be able to manage the conflicts and changes resistance resulting from them (Slevin & Pinto, 1987; Afitep, 1991); he must be able to federate around a common goal (Briner W., Geddes M. & Hastings C., 1993). Also, he must be able to solve problems on the basis of good communication (Slevin D. P. & Pinto J. K., 1987, 2007). The competent and experienced project manager must know how to organize, motivate, involve, and establish the values of equity and social justice, etc., if he wants to succeed in his mission. It is also supposed to possess the personal and professional qualities required.

### **3. Social Projects Success**

The concept of “success” is the goal of all living organizations. Despite the evolution of theoretical approaches dealing with the concept of “success” (ranging from the mechanistic approach to the behavioral and strategic approach), it is still unclear today. This comes down to its complex dimensions, whose evaluations are dependent on divergent points of view and the perception of different stakeholders. In the midst of social projects a plurality of stakeholders requires the evaluation of success according to two major dimensions: technical in the short term whose criteria are the components of the golden triangle cost-time-quality (Atkinson, 1999), and strategic in the long-term based on the subjective evaluation of stakeholders of the social project outcome. In this context, it is possible to cite, for example, the success in terms of impact (the improvement of working conditions and the increase of the standard of living of the members thanks to the income increasing). The difficulty of measurement attributed to the concept of performance is due, according to Briner W., Geddes M. and Hasting C. (1993), to measurement indicators that are not all quantifiable and are based on the perceptions and judgment

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<sup>1</sup> The social project differs from conventional projects in its purely social objective of responding to poorly fulfilled social needs. Ethics, values and the principles of solidarity and sharing are privileged. The manager of social projects must acquire the skills necessary for a good combination between ethics and the instrumental. Motivation is central to the success of the project.

(Turner R. & Muller R., 2007 cited in Abou-hafs H., 2015). Briner W., Geddes M. and Hasting C. (1993) distinguish between “traditional” projects and “new style” projects. The authors consider conventional projects (building or engineering) as being subject to very strict constraints, while new projects are much more flexible and include other criteria besides cost, time and quality (Abou-hafs H., 2015). Slevin D. P. and Pinto J. K. (1987) highlighted “soft” criteria considered strategic and aimed at customer satisfaction; and “hard” criteria considered tactical. Among the dimensions studied by the same authors is the satisfaction of the client. Stakeholder satisfaction has become central to recent writings. The performance indicators identified in the latter are related to the subjective values assessed by the project beneficiaries. From literature review, we can conclude that behavioral and technical skills (personal and professional skills) are a social projects success factors. Hence, we hypothesis that:

- Hypothesis 1: the personal characteristics of project managers are a necessary condition for the success of projects within social organizations, but are not sufficient.
- Hypothesis 2: The professional characteristics of project managers are a necessary condition for the success of projects within social organizations, but are not sufficient.
- Hypothesis 3: The attitudes and behavior of project managers are a necessary condition for the success of projects within social organizations, but are not sufficient.

#### 4. Research Methodology

##### 4.1 Research Framework

The revue of literature of project management showed the importance related to project managers competencies in project success (Slevin D. P. & Pinto J. K., 1987, 2007; Afitep-Afnor, 1991; Briner W., Geddes M. & Hastings C., 1993; Courtot H., 1997; Boudès T., Charue-Duboc F. & Midler C., 1997; Bellihi H. & Abou-hafs H., 2014; Liikamaa K., 2015; Dziekoński K., 2017; Bjorvatn T. & Wald A., 2018; Charbaji S., 2018). It is assumed that competencies of social project managers are note only technical or technological but also are related to behavioral aspect of competencies. On the basis of work of institution PMI-Pmbok® (2013), IPMA-ICB (1999), Afitep (1991) and on different work of authors like Courtot H. (1997); Boudès T., Charue-Duboc F. & Midler C. (1997); Turner R. and Müller R. (2006); Abou-hafs H. & Bellihi H. (2013); Abou-hafs H. (2015); Charbaji S. (2018), we identifying the dimensions of project managers competency showed in Figure 1. Modifications were made to these variables in accordance with the social project management literature. Descriptions of variables are showed in Table 1.

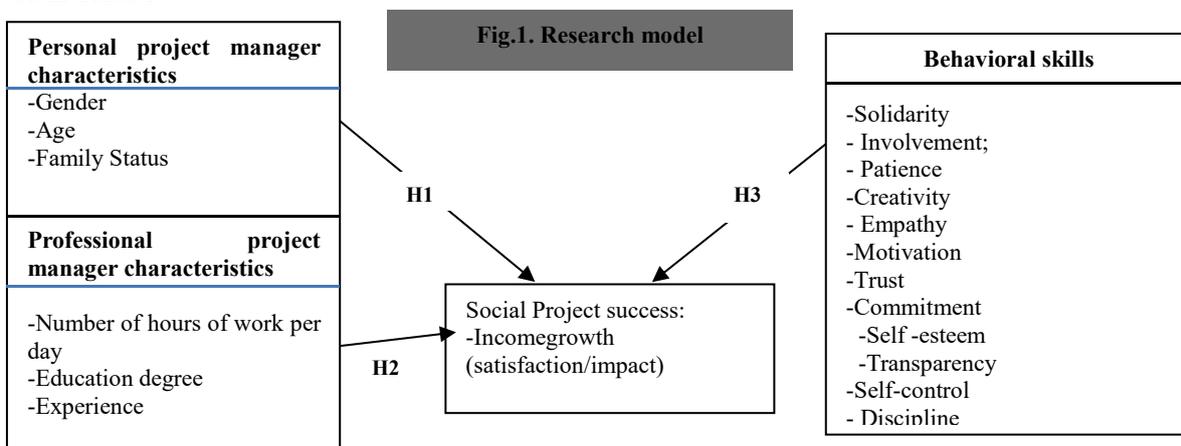


Figure 1 The Dimensions of Project Managers Competency

#### 4.2 Questionnaire Development and Pilot Study

Our research focuses on the analysis of the impact relationship between the skills of project managers and the success of social projects. Social organizations are especially the cooperatives in the city of Agadir (Morocco) represent our target. The questionnaire is distributed by face-to-face to 120 social project managers working in cooperatives and chosen by using non-probability sampling with reasoned choice. The collected data were analyzed under SPSS 17 using the linear and hierarchical regression. The questionnaire includes variables related to the skills of the project managers. The variables were selected from the literature (Table 1).

**Table 1 Descriptions of Variables**

Research variables	Description	Major references
Solidarity	Support given to other members of the social organization to achieve common goal. It's also means collaboration.	Goleman D. (1998); Project Management Institutes (PMI) (2002); Bianchi F. et al.( 2018).
Involvement	The degree of managers involvement indicates their love of social organization. Be involved means have Sense of belonging.	Chmielarza W. and Zborowskib M. (2018); S. Brière et al. (2014).
Patience	Have a good sense of waiting to attain goal. Manager mustn't be precipitate.	Bellihi H. and Abou-hafs H. (2014); S. Brière et al. (2014).
Creativity	Creative managers are not boring and therefore motivate more. They will have ability to thinking different and critical analysis.	Goleman D. (1998); Kerzner H.(2005); Bass B. M. & Avolio B. J. (2000); Dziekoński K.(2017).
Empathy	Degree of comprehension of interpersonal emotion.	Project Management Institutes (PMI) (2002); Mount's (2005); Clarke (2010); Dziekoński K. (2017).
Motivation	Motivation is mostly intrinsic. We want to know if the managers are motivated by the love of the social work or not.	Diallo and Denis (2005); Mount's (2005).
Trust	Self-confidence and trust of managers by other members of the social organization.	Briner W., Geddes M. & Hastings C. (1993, p. 26); Hartman F. T. (2002); Kerzner H. (2005); Diallo & Denis (2005); Müller R. & Turner R. (2010); G. Francisco de Oliveira and R. Rabechini Jr. (2019).
Commitment	Managers loyalty to the social organization.	Goleman D. (1998); Kerzner H.(2005); Brière et al. (2014).
Self esteem	With realizing social work, managers must feel good and therefore develop psychologically. It's similar to self-confidence.	Mount's (2005) ; Liikamaa K. (2015).
Transparency	Honesty and openness. It will also mean help in solving problems by giving right information.	Izatul laili Jabar et al. (2013); Dziekoński, K. (2017); Abou-Hafs H., & Fadila B. (2018).
Self-control	Control emotions and respect the emotions of others.	Dziekoński, K.(2017).
Discipline	Rigor in the project work.	Slevin D. P. & Pinto J. K. (1987).

The questionnaire includes questions on the profile of the respondents, namely gender, age, family situation, education degree, number of years of experience in the management of social projects, number of hours / day of continuous presence in the social organization. Then, questions were asked about the profile of the social organizations surveyed (profit (%); number of members; number of volunteers; number of employees; average income). Finally, questions about the perception of skills of social project managers were asked. Respondents are asked to measure the degree of agreement by responding on a likert scale of 1 to 5 ranging from “Strongly disagree” to “Strongly agree”. The data is analyzed using the statistical data analysis software “Spss17”. The variables in the study were grouped into three categories: personal characteristics of the manager, professional

characteristics, attitudes and behaviors (Figure 1). The questionnaire was tested with 7 social project managers working in social organizations. Following their remarks and suggestions slight modifications were adopted to improve the quality of the questionnaire before its formal distribution.

**4.3. Measures**

The items attributed to the variables related to the attitudes and behaviors of social project managers are inspired and adapted from works by authors like Pinto J. K. and Slevin D. P. (1987; 1988); Afitep-Afnor (1991); Briner W., Geddes M. and Hastings C. (1993); Goleman D. (1998); Bass B. M. and Avolio B. J. (2000) (questionnaire the MLQ 5X (Multifactor Leadership Questionnaire) revised version in 2000; Project Management Institutes (PMI) (2002); Hartman F.T. (2002); Diallo and Denis (2005); Kerzner H.(2005); Kerzner H.(2009); Müller R. and Turner R. (2010); (ICB model-International Competence Baseline, 2006). The success of social projects was measured by items adapted from the work of Diallo and Thuillier (2004) and those of Turner and Müller (2005). For this publication, we will study a single quantitative variable that is the increase income perception.

**4.4. Homogeneity of Measurement Scales**

The cronbach’s alpha for this study gives a result greater than 0.7 for all items (Table 2). This means that the responses of the managers surveyed are consistent with the proposed statements.

**Table 2 Cronbach’s Alpha**

<b>Behavioral factor</b>	<b>Cronbach’s Alpha if item deleted</b>
Solidarity	0.786
Involvement	0.777
Patience	0.770
Creativity	0.781
Empathy	0.787
Motivation	0.785
Trust	0.788
Commitment	0.779
Transparency	0.780
Self-control	0.764
Discipline	0.775
Self esteem	0.771

**5. Results**

In the present study, 120 questionnaires were administered by face to face to project managers within social organizations for two month in the city of Agadir. 105 questionnaires are valid for data analysis; it’s a rate of 87.5%. Recall that the objective of our research is to analyze the impact relationship between the managers competencies and the increase income as a criterion of success. To reach this objective, the analytic statistics (regression, correlations) was used. The data are analyzed by the SPSS statistical data analysis software 17.

**5.1 Demographic Characteristics**

Table 3 summarizes the information given by the respondents. It shows that the project managers surveyed are mostly married, young and educated. They are generally moderately experienced. The majority of respondent is men. They spend more than 6 hours of work at social organization.

**Table 3 Demographic Characteristics**

Gender	(%)	Age (years)	(%)	Family status	(%)	Education degree	(%)
1. Woman	25	a. 18-25	12	1. Single	41.7	1. Illiterate	1.9
2. Man	75	b. 25-35	41.7	2. Married	54.6	2. Primary level	4.6
		c. 35-45	32.4	3. Divorcee	7.9	3. Middle level	9.3
		d. More than 45	13.9	4. Widowed	5	4. Secondary level	21.3
						5. high degree of study (at university)	63
Experience (years)		Number of hours/day of continuous presence in the social organization					
a) 1-15	73.1	a) less than 4h					26.8
b) 15-30	20.4	b) between 4 and 6h					38
c) 30-45	3.7	c) More than 6 h					35.2
d) More than 45	1.8						

### 5.2 Social Organization Characteristics

Table 4 shows that the majority of the social organizations surveyed achieve an average turnover of less than 20 000 dhs. The number of members that represents an important indicator of size varies between 5 and 653 members. The number of volunteers varies between 4 and 300 volunteers. The number of employees for some organizations varies between 0 and 50 employees. More than 50% of these receive an average income of 4000 dhs.

**Table 4 Summary of the Characteristics of Social Organizations**

Turnover (DHS)	Number of members	Number of volunteers	Number of employees	Average income
The majority of the social organizations surveyed, more than 50%, achieve a turnover of less than 20 000 dirhams.	Varies between 5 and 653 members	Varies between 4 and 300 volunteers per project	Varies between 0 employees and 50 employees	More than 50% receive an average income of 4000 dhs

### 5.3 Social Project Characteristics

**Table 5 Project Characteristics**

Project size	(%)	Complexity degree	(%)
1. Large	19.1	1. High	20.9
2. Midium size	59.1	2. Medium	69.1
3. Small size	20	3. Low	8.2
<b>Project team size</b>			<b>(%)</b>
1. Less than 5			12.7
2. Between 5 and 10			41.8
3. Between 11 and 20			23.6
4. More than 21			19.1

Table 5 shows that social projects organized in social organization are mostly medium to large. A large project represents 19.1% and 59.1% represents medium size projects. Our respondents also organize small projects representing 20 %.

- The projects complexity level changes from project to project. Indeed project with medium complexity represents 69.1%. Project with high complexity level represents a rate of 20.9%. And finally, projects with low complexity are around 14.3%. [S1]

- Social projects teams are mostly composed of 5 to 10 people; it ' s a rate of 38.1%. [S2] Frequency of

33.3%.[S3]. represents the rate of teams composed of 11 to 20 people. More than 21 people represent 19.1%.

### 5.4 Ranking and Means of Project Managers Competencies

This part consists to prioritize and extract key competencies of project manager. The arithmetic means and rank orders are used according to their degree of importance. The key competencies must have a mean that is different from 0. A t-test was conducted at 5% level of significance with a test value of zero in order to evaluate the significant level of each of them.

The following Table 6 shows the average arithmetic and rank of 12 project manager competencies. If the factors have the same score, we compare the standard deviation. Only the level of significance on sample t-test is less than 5% (see Table 6) indicates that all the statistics are significant.

**Table 6 Rank order of Key Competencies**

Table One-Sample Test.								
Test Value = 0								
Project manager competencies	Order	t	Df	Sig. (2-tailed)	Mean Difference	Std. Deviation	95% Confidence Interval of the Difference	
							Lower	Upper
Transparency	5	83.516	105	.000	4.64151	.57219	4.5313	4.7517
Self-control	9	54.823	105	.000	4.36792	.82028	4.2099	4.5259
Solidarity	4		89.457	105	.000	4.65094	.53528	4.5479
Commitment	2	94.838	105	.000	4.67925	.50798	4.5814	4.7771
Creativity	10	64.784	105	.000	4.35849	.69266	4.2251	4.4919
Empathy	12	66.980	105	.000	4.28302	.65835	4.1562	4.4098
Motivation	8	70.899	105	.000	4.48113	.65073	4.3558	4.6065
Trust	1	89.984	105	.000	4.69811	.53754	4.5946	4.8016
Patience	6	98.425	105	.000	4.63208	.48453	4.5388	4.7254
Discipline	3	97.670	105	.000	4.66981	.49226	4.5750	4.7646
Involvement	7	72.823	105	.000	4.50000	.63621	4.3775	4.6225
Self-esteem	11	74.347	105	.000	4.34906	.60226	4.2331	4.4650

Table 6 shows the five first key competencies of social project managers witch are: **Trust** (score = 4.69811), **Commitment** (score = 4.67925), **Discipline** (score = 4.66981), **Solidarity** (score = 4.65094) and **Transparency** (score = 4.64151). Other variables represent slightly decreasing scores will vary between 4.63208 and 4.28302.

## 6. Multivariate Analysis: Significant Links Between Variables

### 6.1 Multicollinearity of Independent Variables

Linear regression allows us to confirm or refute the assumptions made in previous sections. It studies the statistical relationship between the dependent variable and several independent variables. Linear regression analyzes are interpreted using several criteria. In the following Table 7 we find the criterion VIF (Variance

Inflation Factors) and the criterion of Tolerance. The results (Table 7) show the Tolerance values and those of VIF are well within the recommended limits ( $VIF < 2$  and  $Tolerance > 0.2$ ). Indeed, the VIF and Tolerance tests indicate that the correlation between the variables is acceptable.

**Table 7 Collinearity, Tolerance and VIF Values**

Independent variables	Collinearity statistics	
	Tolerance	VIF
VAR1	.813	1.231
VAR2	.685	1.461
VAR3	.746	1.340
VAR4	.729	1.372
VAR5	.551	1.816
VAR6	.641	1.560
VAR7	.734	1.362
VAR8	.611	1.638
VAR9	.638	1.567
VAR10	.614	1.628
VAR11	.679	1.474
VAR12	.759	1.317
VAR13	.748	1.337
VAR14	.576	1.737
VAR15	.519	1.927
VAR16	.475	2.104
VAR17	.523	1.912
VAR18	.630	1.588

VAR1: Number of work hours per day in the social organization; VAR2: Education degree; VAR3 : Experience; VAR4: Family status; VAR5: Gender; VAR 6: AGE; VAR7: Solidarity; VAR8: Involvement; VAR9: Patience; VAR10: Creativity; VAR11: Empathy; VAR12: Motivation; VAR13: Trust; VAR14: Commitment; VAR15: Self-esteem; VAR16: Transparency; VAR17: Self-control; VAR18: Discipline.

**6.2 Hypotheses Testing**

On the basis of the results obtained using the literature review we have proposed three hypotheses:

Hypothesis 1: the personal characteristics of managers are a necessary condition for the success of projects within social organizations, but not sufficient.

Hypothesis 2: The professional characteristics of managers are a necessary condition for the success of projects within social organizations, but not sufficient.

Hypothesis 3: The attitudes and behavior of managers are a necessary condition for the success of projects within social organizations, but not sufficient.

To verify these three hypotheses, we developed three regression models. In the first model, we introduced the components of the professional characteristics of managers (VAR1, VAR2, VAR3). In the second model, we added to the professional characteristics the components of the personal characteristics (VAR1, VAR2, VAR3, VAR4, VAR5, VAR6). The third model, for its part, contains more of the first two components the attitudes and behaviors of the managers (VAR1, VAR2, VAR3, VAR4, VAR5, VAR6, VAR7, VAR8, VAR9, VAR10, VAR11, VAR12, VAR13, VAR14, VAR15, VAR16, VAR17, VAR18).

The following table 8 allows us to observe the specific effect of each component model on the success of projects within the social organizations indicated in this paper by increasing the organizations income.

**Table 8 Regression Examining the Influence of Project Manager Competencies on Income Growth**

Summary of models										
Models	R	R <sup>2</sup>	ΔR <sup>2</sup>	ΔF	Change Statistics					Durbin-Watson
					R square change	F change	df1	df2	Sig. F change	
1	.104 <sup>a</sup>	.011	.145	29.337	.011	.069	3	19	.976	
2	.387 <sup>b</sup>	.150	.169	29.631	.139	.875	3	16	.475	
3	.722 <sup>c</sup>	.522	1.629	44.448	.372	.259	12	4	.969	2.863
a. Predictors: (Constant), VAR1, VAR2, VAR3										
b. Predictors: (Constant), VAR1, VAR2, VAR3, VAR4, VAR5, VAR6.										
c. Predictors: (Constant), VAR1, VAR2, VAR3, VAR4, VAR5, VAR6, VAR7, VAR8, VAR9, VAR10, VAR11, VAR12, VAR13, VAR14, VAR15, VAR16, VAR17, VAR18.										
d. Dependent variable: Income growth										

VAR1: Number of work hours per day in the social organization; VAR2: Education degree; VAR3: Experience; VAR4: Family status; VAR5: Gender; VAR 6: AGE; VAR7: Solidarity; VAR8: Involvement; VAR9: Patience; VAR10: Creativity; VAR11: Empathy; VAR12: Motivation; VAR13: Trust; VAR14: Commitment; VAR15: Self-esteem; VAR16: Transparency; VAR17: Self-control ; VAR18: Discipline.

Based on the results presented in Table 8 above, it seems interesting to judge the third model as the most relevant in explaining the variance of the income increasing of the managers surveyed. Compared with the first model explaining 1% of the total variance and the second model explaining 15% of the total variance, the third model alone accounts for 52% of the variance of the increase in income.

The following Table 9 summarizes the results of the variance analysis related to each model. The sum of the squares, the degree of freedom, and the average of the squares are indicated by the present analysis. Indeed, among the three models obtained, the third model displays the most important regression as regards the sum of squares R = 8628,026. Similarly, the latter model has the least significant residue compared with previous models R = 7902,543.

**Table 9 ANOVA Test for Regression Analysis**

ANOVA <sup>d</sup>						
Modeles		The sum of squares	Degree of freedom	The average of the squares	F	Sig.
1	Regression	178.521	3	59.507	.069	.976 <sup>a</sup>
	Residual	16352.048	19	860.634		
	Total	16530.569	22			
2	Regression	2482.164	6	413.694	.471	.820 <sup>b</sup>
	Residual	14048.405	16	878.025		
	Total	16530.569	22			
3	Regression	8628.026	18	479.335	.243	.985 <sup>c</sup>
	Residual	7902.543	4	1975.636		
	Total	16530.569	22			
a. Predictors: (Constant), VAR1, VAR2, VAR3						
b. Predictors: (Constant), VAR1, VAR2, VAR3, VAR4, VAR5, VAR6.						
c. Predictors: (Constant), VAR1, VAR2, VAR3, VAR4, VAR5, VAR6, VAR7, VAR8, VAR9, VAR10, VAR11, VAR12, VAR13, VAR14, VAR15, VAR16, VAR17, VAR18.						
d. Dependent variable: Income growth						

## **7. Discussion**

The results will be discussed according to the assumptions that have been made in the light of the literature. The main trends that emerge from this research are related to the profile of the manager and its impact on the success of social projects. This influence is highlighted by three types of important characteristics. The first type is related to personal characteristics such as age, gender and family status. The second type is related to professional characteristics, including experience, number of hours worked per day, education degree. The last type concerns managers attitudes and behaviors such as Solidarity; Involvement; Patience; Creativity; Empathy; Motivation; Trust; Commitment; Self-esteem; Transparency; Self-control; Discipline. A review of the writings about the skills of social project managers and the success of the projects allowed us to put forward the following hypotheses:

- Hypothesis 1: the personal characteristics of managers are a necessary condition for the project success within social organizations, but not sufficient.
- Hypothesis 2: The professional characteristics of managers are a necessary condition for the project success within social organizations, but not sufficient.
- Hypothesis 3: The attitudes and behavior of managers are a necessary condition for the project success within social organizations, but not sufficient.

The results of our research work shows the importance of combining the three skills studied including personal, professional and behavioral needed by social project managers to achieve success. Overall, we find it inefficient that a good social project manager has only personal competencies or only professional competencies, but he or she must possess all competencies categories and essentially behavioral competencies. These results are supported by the work of project management gurus like Afitep-Afnor (1991); Midler C. (1993); Briner W., Geddes M. and Hastings C. (1993); Courtot H. (1997); Garel G. (2003); Dulewicz V. and Higgs M. J. (2003); Müller R. and Walker D. (2014); Turner R. and Muller R. (2007); Pinto J. K. and Slevin D. P. (1987; 1988); Pinto J. K. and Covin J. G. (1989); Belout A. (1998); Slevin D. P. and Pinto J. K. (2007); Müller R. and Turner R. (2010). Based on our results, we found that the personal characteristics, professional characteristics and attitudes and behaviors of project managers jointly influence the success of social projects indicated by the income growth. On the other hand, there is a weak relationship between each component and success. That said, the increase in income is conditioned not only by age, gender, level of education or experience, but also by the attitudes and behaviors of managers. Consequently, our three hypotheses are validated.

## **8. Conclusion**

This research work presents the results of a quantitative study conducted among social project managers working in social organizations (Cooperatives) within the city of Agadir (Morocco). The study focuses on analyzing the impact of the relationship between the skills of project managers and the success of social projects. Three skills categories identified from the literature review were tested. These are the personal characteristics of managers, the professional characteristics of managers, the behavior and attitudes of managers. The collected data were analyzed under SPSS 17 using the technique of analytic statistics (linear and hierarchical regression). The results support the hypothesis that technical, professional and behavioral skills, successively, are necessary but not sufficient conditions for successful social projects. Therefore, the success of social projects indicated in this study by the increase in income is conditioned by the three types of skills jointly. This indicates that the skills of a good

manager of social projects must be composite and multi-criteria. It is not only about having technical skills acquired through learning but is supposed to develop behavioral skills (Müller R. & Turner R., 2010) and values of social organization. The analysis of the models of the regression confirms this observation. The study of the impact of three categories of project manager skills namely (personal, professional and behavioral) on the success of social projects (income growth) allowed us an important conclusion: that the social projects manager must be flexible to adapt to all situations (Petit M., 1999). This research work can contribute to the success of social projects through the idea of multi-competency (the importance of combining the technical and behavioral skills of social project managers). To analyze the impact relationship between the skills of social project managers and the success of projects, this study was limited to cooperatives located in the city of Agadir. It would be interesting to target other types of organizations in other Moroccan cities. Success in this study was analyzed using a single variable “income growth”, it would be interesting to introduce in the analysis of the success other measurement criteria. It would also be interesting to test the model analyzed for other types of projects. Analyzing the degree of impact related to each variable on project success would be interesting for future research.

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