Perceived Supervisor Supports: Contribution to Aspiration, Mastery and Salience as Three Dimensions of Achievement Motivation

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Abstract: This study examines the influence of perceived work and non-work supervisor supports on aspiration, mastery and salience. Aspiration, mastery and salience are the three dimensions of achievement motivation. A total of 303 Iranian extension agents were surveyed using a set of structured questionnaire. The results show that there are sequential relationships among the three dimensions of achievement motivation. The results also show that perceived supervisor work supports influence employees’ aspiration and mastery, while, supervisor non-work supports is associated with aspiration and salience. Practical and theoretical contributions of this study to human resource issues are also discussed.

Key words: Supervisor Supports • Aspiration • Mastery • Salience • Behavioral Intention • Psychological Aspect • Extension Agents

INTRODUCTION

Over the past decades, studies have confirmed the positive relationship between supervisor supports and employees’ job outcomes; however the intricacies embedded within the relationship have not been fully understood. Psychological aspect is one of the mechanisms that could explain the relationship between the supervisors’ and employees’ job outcomes [1, 2]. One of the employees’ job outcomes is achievement motivation. Thus, this study aims: i) to test this psychological aspect in conceptualizing achievement motivation; and ii) to investigate the influence of supervisor work and non-work supports on achievement motivation dimensions that include aspiration, mastery and salience.

Motivation has been considered to have three psychological functions. First, energizing or activating behavior, which is a cognitive process that gets individuals engaged in or turned off toward learning; second, directing behavior, defined as a cognitive process that describes why one course of action is chosen over another; third, regulating persistence of behavior, which describes why individuals persist towards goals [3]. Armstrong [4] likewise discussed three constituents of motivation that are direction, effort and persistence. We believe that these three components of motivation concur with the above aspects of achievement motivation and are in agreement with Farmer [5] who defined achievement motivation to include three dimensions of aspiration, mastery and salience. Conceptualization of achievement motivation using three dimensions is also supported by London and Noe [6], who discussed the dimensions of achievement motivation consisting of identity, insight and resilience and interpreted them as parallel with the aspiration, mastery and salience concept of Farmer’s studies. Further, London and Noe [6] theorized the sequential relationships of aspiration toward mastery and salience, which is also tested in a study [7] among extension agents and found a significant path. Thus, in this research, achievement motivation is conceptualized using the three dimensions that are aspiration, mastery and salience; this is used to test how aspiration, as the first construct, affects mastery and consequently these two constructs affect salience, which is the first objective of this study.

Aspiration refers to orientations toward a particular career goal [8], which significantly influences one’s value, norms, beliefs [9], pursuit of a particular career path and regarded as a selected goal which is an intention to act in
the near future [10]. Mastery refers to “the tendency of persons to choose difficult challenging tasks rather than easy tasks and to keep struggling to master the task once they have started” [11, pp. 366]. Salience refers to “the extent to which a person sees involvement in a career as central to his or her adult life role” [11, pp. 366]. Employee salience is very important in the current situation of organizational restructuring and downsizing, which may cause life stresses and consequently question the significance of career goals.

Research by different scholars paved achievements in positive relationships between supervisor or organizational supports and employee performance but no study so far has investigated the relationships of supervisor supports by considering work and non-work supports and the three sequential dimensions of achievement motivation, which is the second objective of this study. Although there are researchers who discussed the non-work supports by having in mind the support received from the non-work domain like family, friend and peers, but in this research the non-work supports refers to supervisor care on employee wellbeing using the perceived organizational support theory [12]. Non-work support in literature usually parallels with the concept of work-family support, which may not be applicable to the considerable number of employees who are unmarried, therefore in this research work-life support is used instead. Thus, non-work support refers to work-life support received from the supervisors such as flextime, non-work supports to see how these two dimensions of supports are associated with achievement motivation that is a novelty in the current research. More precisely, the conceptualization of work and non-work supports has drawn from the organizational support theory [12] this paper conceptualizes the supports in terms of work and non-work supports to see how these two dimensions of supports are associated with achievement motivation that is a novelty in the current research. More precisely, the conceptualization of work and non-work supports has drawn from the organizational support theory.

Literature Review: Organizational support theory revealed that employees develop a general perception concerning the extent to which the organization values their contributions and cares about their well-being [12]. Similarly, employees shape global perceptions concerning the degree to which supervisors value their contributions and care about their well-being [14]. Although employees often perceive their supervisors as representatives of the organization, they do engage in enduring exchanges with both the organization as a whole and their immediate supervisor. It is even possible that the employees develop exchange relationships with supervisors that are distinct from those they experience with their organization [15]. The exchange theory further supported the importance of employee and employer relationships. According to the exchange theory, when employers and employees consider each other’s needs and interests, the sense of obligation goes further than the parameters of formal responsibility and over periods of time, reinforcing the link between employees and employers [16]. Considerably, if a supervisor as an influential person could build a job climate that is supportive for physical and psychological aspects of a job, the sense of linkage go toward job satisfaction [17].

Research has shown that perceived supervisor supports are positively and significantly associated with favorable job outcomes and work experiences. For instance, a research using a general concept of support among Brazilian professionals, found perceived supervisor supports significantly related to affective and continuance organizational commitment [18]; and also totally mediated the effect of favorable intrinsically satisfying job conditions on affective commitment [15]. On the other hand, supervisor supports can influence employee empowerment [19], organizational citizenship behavior through job satisfaction and job tension [1] and mediate the relationships of transformational leadership and employee customer orientation [20].

Further, a study in the Iranian context claims that the demographic variables such as age and marital status are influential on perceived social support, one of which is supervisor support [21]. Though, the limitation of past research was to analyze the consequence of support using only a general concept of it, looking at the organizational support theory [12] this paper conceptualizes the supports in terms of work and non-work supports to see how these two dimensions of supports are associated with achievement motivation that is a novelty in the current research. More precisely, the conceptualization of work and non-work supports has drawn from the organizational support theory.

In support of the view that employees’ evaluations of the work support received from the supervisor reflect social exchange processes, Chow, Lo, Sha and Hong [22] stated that in order to create a good work environment in which the employees intend to pay back the organization, managers should provide opportunities for staff growth, involvement in decision-making and rewarding experiences. This is similar to the concept of autonomy encouragement, which London and Noe [6] put as work support indicators that could influence the aspiration,
mastery and salience of the staff. Supervisors could support workers through the provision of feedback and resources for skill development, showing the importance of employees and encouraging the exercise of recently acquired skills [23] that could increase the employee’s sense of salience [6].

To our knowledge, limited studies have focused on the supervisor non-work supports. In a study among managerial personnel in New Zealand, supervisor support for work-family balance displayed significant relationships with work-to-family interference which has found to be influential on managerial well-being [24]. Allen [25] examined family-supportive organizations and found that it explains a significant amount of variance associated with work–family conflict, job satisfaction, organizational commitment and turnover intentions above and beyond the variance explained by the number of family-friendly benefits available by the organization and supervisor supports. Chang [26] found that organizational support, supervisor support and non-work support were related to employees’ work-life balance when work-life balance significantly mediates the relationship between supervisor support and all employee outcomes. Further, since the availability and usage of the policies related to work-life balance were not found to be related to favorable employee outcomes, then it is recommended that supervisor supports might be a better option than introducing various work-life balance policies for employees to achieve a better work-life balance and job outcomes. Thus, supportive supervisors are crucial agents in creating a supportive environment because they are the ones who make rules and regulations for the employees. Having a life supportive supervisor reduces work-family conflict and encourages employees to further stay with the organization and motivate them to achieve job roles in particular and generate higher performance in general [27]. Although it is not fully understood how supervisor non-work supports would be associated with dimensions of achievement motivation which is the focus of current study.

Based on the above reviews, a research framework is developed as indicated in Figure 1. In which, to cover the first objective of this research that is the sequential relationships of aspiration, mastery and salience and have been supported by the career motivation theory [6], the H1, H2 and, H3 is developed. Further, the extent to which the increase in perceived supervisors’ support would influence the level of motivation to attainment of excellence through affecting aspiration, mastery and salience which have been supported by the perceived organizational support theory [12], is a foundation for the second objective of this research and development of H4 and H5.

**H1:** Aspiration mediates the relationships of mastery and supervisor work and non-work supports.

**H2:** Mastery mediates the relationships of salience and supervisor work and non-work supports.

**H3:** Mastery mediates the relationships of aspiration and supervisor supports.

**H4:** There is a relationship between supervisor work supports and three dimensions of achievement motivation that consists of aspiration, mastery and salience.

**H5:** There is a relationship between supervisor non-work supports and three dimensions of achievement motivation that consists of aspiration, mastery and salience.

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**Fig. 1:** The research framework
MATERIALS AND METHODS

Population and Sampling: Three hundred three extension agents (237 male and 66 female) working in extension departments of three Jihad-e-Agriculture organizations were the research respondents. The organizations were located in the three provinces of Kermanshah, Tehran and Khorasan-Razavi in Iran. A random cluster sampling was conducted to determine the study sample whereby out of 32 Jihad-e-Agriculture organizations, three were randomly selected as the main clusters of the study. In terms of demographic features, the majority (67.3%) of respondents had a Bachelor of Science degree and 17.2% held an upper level degree while 15.5% of respondents had education attainment levels that were lower than Bachelor of Science degree. The average age of respondents was 41 years old. A cumulative percentage shows around half of the respondents (51.5 %) had less than 15 years’ worth of work experience in which the percentage of extension agents (20.5%) with less than 5 years of work experience was remarkable.

The sample size was determined based on the number of variables, free parameters and the complexity of the framework that is the recommended rule by scholars who use Structural Equation Modeling (SEM) [28]. The calculated sample size was 370 and the response rate was 82%. Thus, 303 questionnaires were collected out of the 370 distributed questionnaires.

Instrument Validity and Reliability: A structured questionnaire was prepared as the instrument of the study. The content and face validity of the instrument which was in English, was first improved by three experts in the area. The questionnaire was later prepared in Persian, which is the language of the respondents. Thus, to check the validity of the scale formed originally in English, translation and back translation was performed. After the back translation, another Iranian subject matter specialist was consulted to improve the face validity of the instrument. To assess the internal consistency, a pilot study was conducted from 32 extension agents who were not included in the research. The results indicated that all variables showed acceptable values of Cronbach’s alpha.

Measures: Five variables were included in this research where their related measurements are as follows: Aspiration is measured by the coping version of career aspiration scale of O’Brien Gray, Tourojdi and Eigenbrode, 1996 [29] that was translated to Persian and adapted in Karami et al. [30, 31] with a reliability of .877. The scale is composed of 10 items including three reversed score items which use a 5-point Likert-type scale ranging from “not at all true of me” to “very true of me”. The edited version of the Work and Family Orientation Questionnaire (WOFO) designed by Helmreich and Spence in 1978 cited in Leal [29] was used in this study to measure the mastery motivation. It contains 8 items including three reverse items which refer to the desire for intellectual challenge with alpha reliability of .61 using a 5-point Likert scale ranging from “Strongly agree” to “Strongly disagree”. The latest version of the salience scale developed by Farmer [5] was used to assess the respondents’ salience towards achievement motivation in leadership role. The scale was modified to develop a relevant scale for the context of this study and consists of 10 items with two reversed score role items in a five-point Likert response scale. The scale of supervisor supports cited in [23] from Maurer, Weiss and Barbeite, 2003 with a reliability of .92 was used in this study. The modifications include emphasis on two dimensions of work and non-work supports. Respondents completed 14 items in which four of them were related to organization non-work support and 10 items were related to work support. The answers ranged from strongly disagree (1) to strongly agree (5).

RESULTS

Prior to conducting the data analysis, in order to ensure that the data meets the required values, data screening is conducted. Then, to answer the study’s inferential objectives, two stages of analyses were conducted as general stages in using the Structural Equation Modeling (SEM). In the first stage the measurement model developed and assessed while the second stage was related to specifying and assessing the structural model.

Data Screening: Prior to conducting the data analysis, the data was screened for normality, outlier and multicollinearity. Data screening is an important step prior to starting the analysis, because if the data is not supportive of these assumptions, then it would affect the analysis results. The first assumption is normality which is an important assumption using Maximum Likelihood Estimates (MLE). The result of the normality assessment showed that the data assumed to be normally distributed in this study as skewness and kurtosis is within the range of +/- 1.0 [28]. Secondly, the data screened for the outlier, which is the case with unusually high or low values [32]. According to Hair et al. [32]
Mahalanobis distance divided by degree of freedom value exceeding 3 or 4 in large samples shows the possibility of outlier existence. In this study, there is no case with a potential of being outlier. The third assumption is multicollinearity; that happens if two or more variables show a high correlation which means these variables represent the same underlying construct [33] and a criterion for its existence is a correlation of more than .9. In this research, the highest correlation of the constructs was less than .9.

The Measurement Model: The measurement model was established using confirmatory factor analysis and was assessed based on multiple criteria of Goodness-Of-Fit (GOF) measures that reflect statistical, theoretical and practical considerations. Goodness-Of-Fit measures are the extent to which the observed covariance input matrix corresponds with or departs from that predicted from the proposed model [34]. According to Hair et al. [32] when three to four indices including one of the absolute indices and one of the incremental indices meet the criteria, it provides adequate evidence of a model fit. Table 1 shows the result of GOF indices for the measurement model.

Table 1: Goodness-Of-Fit measures determining the model fit

<table>
<thead>
<tr>
<th>Goodness-Of-Fit Type</th>
<th>Recommended range</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square Model fit</td>
<td>p &gt; .05</td>
<td>.000</td>
</tr>
<tr>
<td>Chi-square/df (CMIN/DF)</td>
<td>Absolute Model Parsimony</td>
<td>Value &lt; 2.0</td>
</tr>
<tr>
<td>Goodness-of-Fit Index (GFI)</td>
<td>Absolute Fit</td>
<td>Value &gt; .9</td>
</tr>
<tr>
<td>Comparative Fit Index (CFI)</td>
<td>Incremental Fit</td>
<td>Value &gt; .9</td>
</tr>
<tr>
<td>Normed Fit Index (NFI)</td>
<td>Incremental Fit</td>
<td>Value &gt; .9</td>
</tr>
<tr>
<td>Tucker-Lewis Index (TLI)</td>
<td>Incremental Fit</td>
<td>Value &gt; .9</td>
</tr>
<tr>
<td>Incremental Fit Index (IFI)</td>
<td>Incremental Fit</td>
<td>Value &gt; .9</td>
</tr>
<tr>
<td>Root Mean Square Error of Approximation (RMSEA)</td>
<td>Absolute Fit</td>
<td>0.03&lt; Value &lt; 0.08</td>
</tr>
</tbody>
</table>

The specification of the measurement model and getting model fit are important due to the fact that they provide a foundation for testing the factorial validity of scores from a measuring instrument. Table 2 demonstrates the results of convergent and discriminant validity as the indicator of constructs validity which were all satisfactory. The convergent validity was satisfied in this study, in which all the items had significant high standardized factor loading on their underlying constructs (values ranged from .551 to .856 as shown in Table 2). Moreover, the convergent validity of constructs was assessed based on the Average Variance Extracted (AVE) in which AVE for all of the constructs was equal to or exceeded the minimum criterion of .50, indicating that the majority of the variance was explained by the constructs [32]. The construct reliability that is presented in diagonal Elements of Table 2 ranged from .854 to .908 and exceeded the minimum requirement of 0.7, ensuring adequate internal consistency, which is another indicator of convergent validity.

Discriminant validity shows how well a construct is truly distinct from other constructs. As indicated in Table 2, off diagonal elements are square of correlation between each two constructs which are less than the value of the first column that is the value of AVE so the discriminant validity of construct are supported. Thus, based on the above-mentioned criteria of convergent validity and discriminant validity, the study’s constructs are valid.

The Structural Equation Model: After specification and validation of the measurement model, the structural model was represented by specifying the set of relationships between constructs. In this study the structural model will be completed in three steps that allow for testing the specific hypothesized mediated sequential relationships of achievement motivation dimensions separately. First, the relationships of supervisors’ work and non-work supports with aspiration will be tested which show that the primary level of being motivated to achieve something is aspiration. Then, by entering mastery to the model, we will test the mediator role of aspiration on the relationships of supervisor supports and mastery; it means after aspiring something we need to be the master of that for its achievement. After aspiration and mastery,
Table 2: AVE, Construct Reliability and Square of correlation

<table>
<thead>
<tr>
<th>Variable</th>
<th>AVE</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Supervisor work support</td>
<td>.585</td>
<td>.908</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Supervisor non-work support</td>
<td>.630</td>
<td>.908</td>
<td>.872</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Aspiration</td>
<td>.518</td>
<td>.906</td>
<td>.095</td>
<td>.882</td>
<td></td>
</tr>
<tr>
<td>4. Mastery</td>
<td>.50</td>
<td>.066</td>
<td>.021</td>
<td>.095</td>
<td>.854</td>
</tr>
<tr>
<td>5. Salience</td>
<td>.516</td>
<td>.034</td>
<td>.054</td>
<td>.042</td>
<td>.055</td>
</tr>
</tbody>
</table>

Note: Diagonal elements are Construct Reliability

Model 1: The Relationships of Supervisor Work and Non-Work Supports and Aspiration: Figure 2 shows the first structural model of study which indicates that the data fit the model by: $\chi^2 (132) = 269.454, p = .000 \chi^2/DF = 2.041; \text{GFI}=.866, \text{AGFI}=.843, \text{CFI}=.930, \text{NFI}=.857, \text{TLI}=.924, \text{IFI}=.931, \text{RMSEA}=.052$. The main purpose in this analysis was to see the relationships of supervisor work and non-work supports with aspiration and further to check how the supervisor work and non-work supports contribute in explained variance of aspiration. The results show that there is a significant relationship between supervisor work ($\beta=.20$) and non-work ($\beta=.19$) supports and aspirations. Further, these two exogenous variables explained the 12 percent of variability in aspiration.

Model 2: The Relationships of Supervisor Work and Non-Work Supports and Mastery Through Aspiration: Figure 3 shows the second structural model of study which indicates that the data fit the model by: $\chi^2 (246) = 447.041, p = .000 \chi^2/DF = 1.817; \text{GFI}=.890, \text{AGFI}=.865, \text{CFI} = .946, \text{NFI}=.888, \text{TLI} = .939, \text{IFI} = .946, \text{RMSEA} = .052$. The main purpose of designing the second model was to see the relationships between mastery and the supervisor work and non-work supports and to test the mediation effect of aspiration. The model shows that aspiration partially mediates the relationship of the supervisor work supports and mastery (supervisor work support $\rightarrow$ aspiration $\rightarrow$ mastery; $\beta=.20$ and $\beta =.13$, respectively) as the direct relation of work supports and mastery is non-significant ($\beta=.06$). Further, supervisor work and non-work supports and aspiration together explained 13 percent of variability in mastery, which is one percent more than the explained variance by the first model with aspiration as the endogenous variable.

Model 3: The Relationships of Supervisor Work and Non-Work Supports and Salience Through Aspiration and Mastery: Figure 4 shows the third and final structural model of study which indicates that the data fit the model...
The results of the first hypothesis testing show that the relationship between work supports to aspiration and aspiration to mastery were significant (β=.20 and β=.26 respectively), whereas the direct relation between work supports and mastery was also significant (β=.21) after including the aspiration as mediator variable. Thus, aspiration partially mediates the relationships of supervisor work supports and mastery. The results further showed that the path relation between non-work supports to aspiration and aspiration to mastery were significant (β=.19, β=.26 respectively) alongside with non-significant relationships of non-work supports and mastery (β=.06) indicating that; the relationships of non-work supports and mastery are fully mediated through aspiration. Herein, although supervisor non-work supports could not directly influence the employee in terms of mastery motive, but non work supports through full mediation effects of aspiration influence mastery dimension of achievement motivation. Overall, H1 is supported as aspiration partially mediates the relationships of supervisor work supports and mastery, while aspiration is a full mediator of non-work supports and mastery.

Another result regarding mediation effects of mastery on the relationships of supervisor supports and salience shows that; the relationship between work supports to mastery and mastery to salience were significant (β=.21 and β=.21 respectively), whereas the direct relation between work support salience was non-significant (β=.02) after including the mastery as a mediator variable.
Thus, work supports is fully mediated through mastery toward salience while, the path relation between non-work supports to mastery was non-significant ($\beta=.06$) showing that mastery does not mediate the relationships of non-work supports and salience. Overall, the H2 is supported in terms of mediation effects of mastery on the relationships of supervisor work supports and salience.

Regarding H3, the model shows that mastery fully mediates the relationships of aspiration and salience, as the relationships of aspiration to mastery and mastery to salience were significant ($\beta=.26$ and $\beta=.21$ respectively), alongside with non-significant relationships of aspiration to salience ($\beta=.09$) after entering mastery as the mediator variable.

To answer H4 as showed in Figure 4, there is a significant relationship between supervisor work supports with aspiration ($\beta=.20$) and mastery ($\beta=.21$) while this relationship was not supported for salience ($\beta=.02$). This means that although supervisor work support is directly influential in the aspiration and mastery level, it could not guarantee the salience level of achievement motivation.

To answer H5 as demonstrated in Figure 4, there are significant relationships between supervisor non-work supports with aspiration ($\beta=.19$) and salience ($\beta=.18$) but not for mastery ($\beta=.06$) which, as discussed in H1, non-work supports fully through aspiration influences the mastery dimension of achievement motivation.

**DISCUSSION AND CONCLUSION**

The present study was motivated by two objectives: to test the sequential relationship of achievement motivation dimensions through H1, H2 and H3; and to investigate the relationships of supervisor work support (H4) and non-work (H5) supports and achievement motivation dimensions using a comprehensive model. Thus, this study contributes to a deeper understanding of the effects of supervisor supports by answering the questions on how supervisor supports could psychologically enhance the employees’ display of achievement motivation.

Concluding the first objective of this study, the results of significant mediation effects of aspiration and mastery towards salience showed that to be motivated to achieve first, the individual needs to aspire a goal (aspiration) that would affect the hard work to be master at the required competencies of that goal (mastery) and then to truly achieve the goal, salience is the last step that guarantees persistence of motivation to achieve the goal. The results of sequential relationships of the three dimensions of achievement motivation are consistent with London and Noe’s [6] theory and other scholars’ discussion of motivation constitutes [3, 4].

The second objective of this study was achieved using the fourth and fifth hypotheses. The results of the fourth hypothesis indicate that the supervisor work supports would intensify the aspiration and mastery and could not motivate the employee at the salience level. While based on the fifth hypothesis results, supervisor non-work supports, in addition to increasing the aspiration, could intensify the employee’s motivation to reach the salience level of achievement. It is consistent with Maslow’s hierarchy of needs that describe the pattern that human motivations generally move through in which the need to care about the belonging precedes the need for achievement. Thus, even though the work support could intensify the employee to set the goal (aspiration) and being a master at the task or career roles (mastery), un-satisfaction of the need to care about the belonging (non-work support) may cause a halt at the salience level, while achievement motivation would be crystallined through aspiration, mastery and salience. Having aspiration of a career goal and being master at the required competency of that goal does not guarantee the required motivation to achieve the goal, the last complementary step is seeing involvement in that goal as remarkable in career life, which according to this study’s results, it is salience and it depends on non-work supports. Dependency of salience on non-work supports could be explained by looking back at the Maslow hierarchy of need in which physiology, safety and love/belonging are defined as deficiency needs that if these deficiency needs are not met, the individual will feel anxious and tensed. And in our understanding, in such a situation the employee could not freely think of achievement of a career goal and see involvement in that goal as remarkable in career life which is the meaning of salience.

Overall, the results support that the supervisors of extension agents in Jihad-e-Agriculture organizations of Iran were provided an appropriate level of work and non-work supports to lead the extension agents towards higher achievement motivation. Further, the study contributes to the body of knowledge by declaring the sequential relationships of the three dimensions of achievement motivation and revealing the complementary role of supervisors’ work and non-work supports. The future extension would be testing the moderating effects of demographic variables as suggested in a study [21] on the relationships of supervisor supports and achievement motivation dimensions.
A limitation of this study is that only one endogenous variable, the supervisor supports, has been used to examine achievement motivation, which leads to a small variance or explanatory power to the phenomenon. Another limitation is that this study is not free from the common method variance bias and response consistency effect; however, observed scores, negatively worded items and randomized item order have been considered in the methodology to reduce the bias [35].

REFERENCES