Study of the Locus of Control in a Gaming Equipment and Repair Company

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Abstract: *Locus of control is a construct used to explore and analyze individual's personality traits in various environments. It is related to how people perceive responsibility for events in their lives and in a professional context. The present study investigates the manifestation and distribution of internal and external locus of control among technicians and engineers employed in a private company specializing in the repair and maintenance of gaming equipment. Locus of control, conceptualized as a stable psychological orientation reflecting individuals' beliefs about the degree to which they can influence outcomes in their professional environment, is a key determinant of work behavior, motivation, and organizational adaptability. Using a structured survey based on a validated psychological scale, data were collected from employees occupying various technical and engineering positions. The results demonstrate a prevailing tendency toward an internal locus of control, suggesting that most participants perceive work-related outcomes as contingent on their own skills, efforts, and decisions. Statistical analysis reveals that a stronger internal orientation is positively associated with heightened personal responsibility, proactive problem-solving, and greater commitment to assigned tasks. Conversely, respondents with a more external locus of control report lower levels of autonomy and a higher reliance on external factors such as luck, organizational constraints, or management decisions. The findings underscore the importance of locus of control as a psychological resource that contributes to employee effectiveness, motivation, and resilience in dynamic technical work environments. The study highlights the practical implications for human resource management, including the potential benefits of fostering internal control orientations through targeted training, supportive leadership practices, and organizational policies aimed at enhancing employee empowerment.*

Keywords*: LOCUS OF CONTROL, WORK BEHAVIOUR, EMPLOYEE RESEARCH, SLOT MACHINES, PERSONALITY TRAITS, JOB PERFORMANCE, HUMAN CAPITAL, MAINTANENCE*

1. Introduction

Locus of control describes how a person perceives control over his own behavior or expects to be reinforced for a demonstrated behavior. A person with an internally oriented locus of control would view personal control over circumstances as coming from within himself; a person with an externally oriented locus of control would view something outside of himself, such as chance, fate, or another person, as having control over his circumstances [1, 11]. Understanding the factors that drive individuals to strive for success is one of the main questions in psychology. Locus of control and Julian Rotter's *Social Learning Theory* [12] illustrate the extent to which individuals attribute the results of their behaviour to internal factors—such as abilities and effort—or to external factors—such as fate, chance, or external interference. These concepts explain why some individuals are more consistent, goal-oriented, and successful than others. Locus of control is directly related to feelings of personal efficacy, motivation, decision-making, and coping strategies in various life and professional situations. Individuals with an internal locus of control view success as a result of their own actions and therefore tend to exert more effort. In contrast, those with an external locus of control often attribute success to external forces, which diminishes their motivation.

The results obtained through research on locus of control indicate significant differences in: the organization of cognitive processes; emotional reactivity; the regulation of motivation; susceptibility to stress and preferred coping strategies; interpersonal relationships; and more [2].

In an organizational context, locus of control plays a particularly important role as it influences how employees perceive responsibility for their own performance and the outcomes of their teams. Studies by various psychologists suggest that individuals with an internal locus of control are more likely to demonstrate proactivity, higher job satisfaction, and resilience under stress. Conversely, externally-oriented individuals often show lower engagement and greater dependence on external stimuli and evaluations. Understanding this construct is practically important for human resources management and organizational development. By identifying the locus of control, the process of motivation can be optimized, and better selection and training of staff can be achieved. Furthermore, various development approaches, such as training skills for self-reflection, setting realistic goals, and providing feedback, can be implemented to improve organizational effectiveness and the overall psychological well-being of employees.

2. Significance of the Construct in Work and Organizational Context

Locus of control is a psychological construct that represents an individual's generalized expectations regarding the extent to which they can control what happens in their life through their own behaviour, and to what degree it is controlled by external factors. Julian Rotter introduced this term within the framework of his social learning theory [12]. An internal locus of control refers to the generalized expectation that outcomes (whether positive or negative) are viewed as the result of one's own actions, i.e., they are subject to internal, personal control. In contrast, an external locus of control attributes the outcomes to causes outside the individual—such as luck or powerful external circumstances. The external locus of control reflects the tendency of an individual to perceive themselves as dependent on external factors beyond their personal control [6 - 9].

According to Rotter's theory, behaviour is the result of the continuous interaction between the individuals and their environment, shaped by the person's personality and experiences. The theory combines behavioural and cognitive elements, suggesting that behaviour is a function of the expectation (the perceived likelihood of a particular outcome) and the value of reinforcement (the desirability of the outcome) for a specific behaviour in a given situation.

In organizational psychology, the locus of control is regarded as a predictor of motivation, effort, performance, efficiency, work engagement and job satisfaction, perceptions of work, and obedience to authority. Managers and employees with an internal locus of control tend to demonstrate leadership behaviour, responsibility, and engagement [12-14].

Employees with an internal locus of control typically perceive higher levels of personal competence and take responsibility for their own performance. Thus, the locus of control is also associated with the *desire for control*, understood as a trait reflecting the degree to which individuals are motivated to influence events in their lives. People with a strong desire for control usually possess an internal locus of control, display persistence, and have higher aspirations. They tend to respond more effectively to challenges and perceive themselves as the source of their own success. Such individuals are more likely to seek solutions in difficult situations, actively participate in decision-making processes, and adapt to organizational changes. Conversely, employees with an external locus of control may exhibit lower initiative, greater dependence on

authority, and an increased sense of helplessness under pressure or change [1,2].

More recent studies also confirm the hypothesis that an internal locus of control is associated with higher motivation, proactivity, and work performance. In a study conducted by researchers from the University of Brașov, the influence of locus of control on job performance and satisfaction with remuneration was examined among 61 employees from various professional fields (33 women and 28 men). The results showed no significant gender differences in locus of control. However, significant correlations were found between locus of control and job performance, as well as between locus of control and satisfaction with pay. Individuals with an internal locus of control were more motivated and engaged with their professional goals, which led to better performance. Conversely, those with an external locus of control were less committed to assigned goals and tasks and showed lower motivation [4].

According to Higgs and Williams [8], it is important to examine locus of control differences between males and females. According to McGhee and Crandall [17], a greater number of women are entering to the labor force and they are competing for jobs which previously had been reserved for men. Thus, gender difference is vital and here their entry into labor force is an increasing interest in the study of sex differences on locus of control and their impact on job performance.

These and other studies support the importance of examining the locus of control across different professional groups, genders, and age categories in real work environments, which is the objective of the present study.

3. Research Method

The current study involved 20 employees (71.43%) out of a total of 28 employees in a maintenance company based in Sofia, Bulgaria with activities including *trade, production, maintenance and distribution of gaming machines*. Among the participants, there were 10 women and 10 men; 5 managers (engineers) and 15 employees; 9 individuals under the age of 40, and 11 over 40; 14 with higher education and 6 with secondary education.

The Locus of Control Questionnaire, adapted and validated by Angel Velichkov and Maria Radoslavova [3]., was used in the study. The test consists of 20 pairs of alternative statements, where one statement measures internal locus of control and the other measures external locus of control. Five of the statement pairs are not scored, as their purpose is to conceal the construct's true content and prevent participants from discerning the test's logic. Only the statements reflecting internal and external locus of control are evaluated. A score of 1 point is assigned to statements indicating external localization, and 0 points to those reflecting internal localization. A total score is calculated for each participant, where higher scores indicate an external locus of control, and lower scores indicate an internal locus of control. As a general norm, a result of up to 7 points suggests an internal locus of control, while 8 points or more indicates an external locus of control.

Research Objectives

- To construct a frequency distribution of the obtained results,
- To analyse the interrelations between locus of control and the variables: position, education, age, and gender.

Research Hypotheses

Hypothesis 1: Gender differentiation of values — a greater proportion of men will demonstrate an internal locus of control, while among women, an even distribution between internal and external locus of control will be observed.

Hypothesis 2: Managers will predominantly exhibit an internal locus of control, while among employees an even distribution between internal and external locus of control will be observed.

Hypothesis 3: Employees over 40 years of age will predominantly show an internal locus of control; among employees under 40, the distribution between internal and external locus of control will be relatively even.

4. Results

1. Locus of Control and Gender

Among female participants, results indicate an even distribution between internal and external locus of control (figure 1). Among male participants, 80% demonstrated an internal locus of control, and 20% an external locus (figure 2). These results confirm Hypothesis 1, which proposed that a greater proportion of men would demonstrate an internal locus of control, while among women an even distribution between internal and external locus of control would be observed.

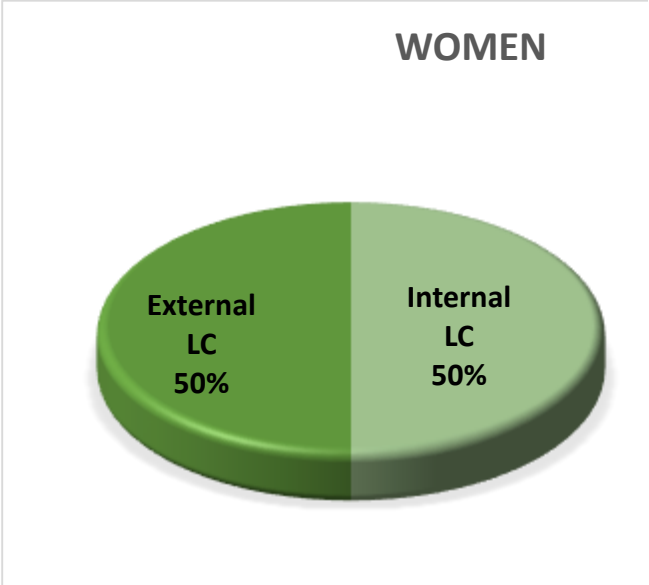

Fig. 1 *Women Distribution of Locus of Control*

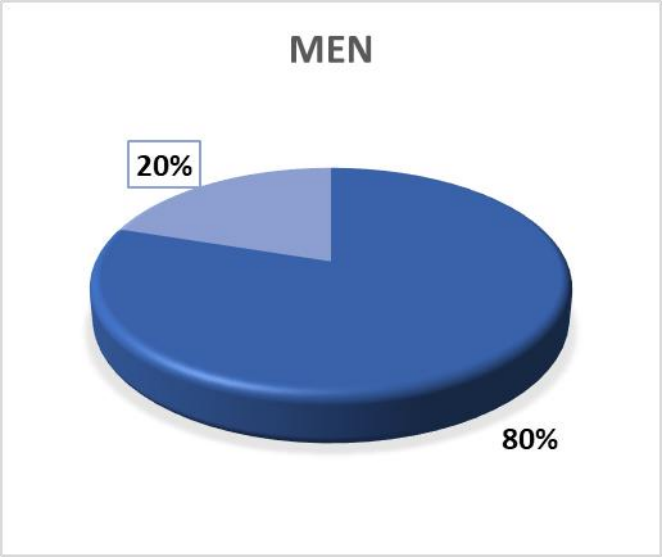

Fig. 2 *Men Distribution of Locus of Control*

2. Locus of Control and Position

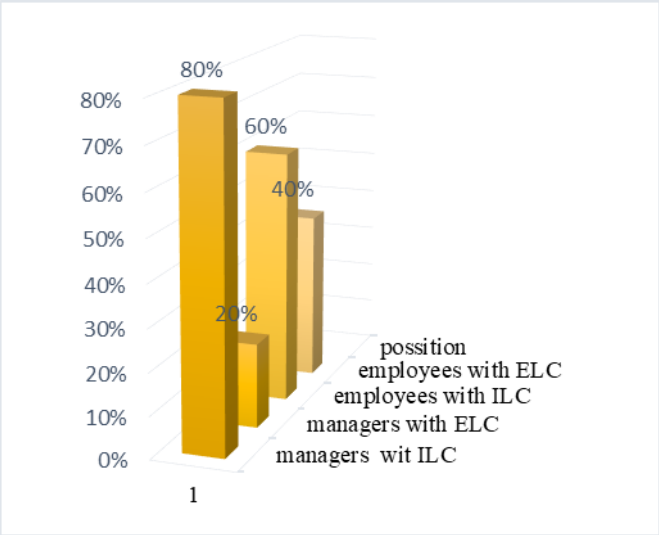

Fig.3 *LC and position*

It was found that the degree of locus of control within most of the executive level employees (engineers) is internal
Overall analysis of the results according to the participants' professional position revealed the following distribution:

• Managers (Engineers):
External locus of control – 20%
Internal locus of control – 80%
• Employees (Technicians):
External locus of control – 40%
Internal locus of control – 60%

The second hypothesis, stating that managers would predominantly demonstrate an internal locus of control, was confirmed. Among employees, the hypothesis predicting a relatively even distribution between internal and external locus of control was also supported, though not as strongly as in the case of managers (figure 3).

3. Locus of Control and Age

Table 1: *Locos of Control and Age*

Age Group	Internal Locus of Control %	External Locus of Control %
Under 40 years	55.56 %	44.44%
Over 40 years	72.73%	27.27%

As can be seen in *Table 1*, the data indicate that employees over 40 years of age predominantly exhibit an internal locus of control—72.73%, compared to 27.27% with an external locus of control within this age group. Among employees under 40, there is a slight predominance of individuals with an internal locus of control (55.56%) compared to 44.44% with an external locus. (Table 1)

These results confirm Hypothesis 3, which proposed that employees over 40 years old would predominantly have an internal locus of control, while among those under 40, the distribution between internal and external locus would be relatively balanced.

4. Overall Distribution of Locus of Control

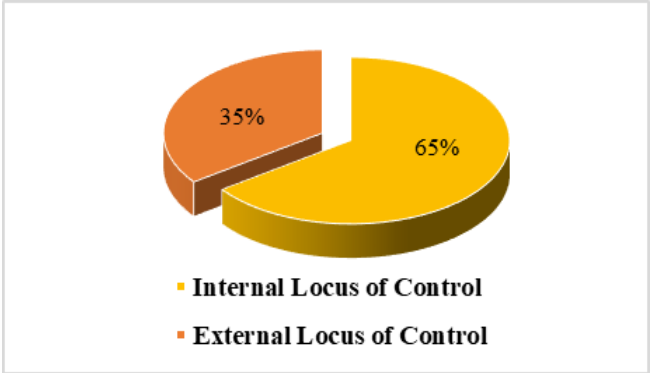

Fig. 4 *Overall Distribution of Locus of Control*

Figure 4 presents the overall distribution of participants with an internal locus of control (65%) and those with an external locus of control (35%).

4. Discussion

The results of the present study confirm the trend widely reported in the literature [4,5]; [11-14], among others] that an internal locus of control is more frequently observed among individuals in leadership and managerial positions. Managers with an internal orientation demonstrate greater proactivity, decisiveness, and strategic thinking, whereas employees with an external locus of control tend to adhere more strictly to instructions and rely on guidance from superiors. This supports the notion that locus of control functions as a psychological foundation for leadership and managerial effectiveness [9,4].

An interesting finding in this study is the relatively high internal locus of control scores among employees, which might partly be explained by social desirability bias—that is, the tendency of some participants to respond in a manner perceived as favorable rather than fully authentic.

The observed predominance of an internal locus of control (65%) among all participants indicates the presence of a dominant group of individuals who believe that their success primarily depends on their own efforts and competencies. This reflects a high degree of intrinsic motivation, self-regulation, and responsibility—key characteristics of effective organizational behaviour.

Gender differences also align with previous research, which suggests that men generally exhibit a stronger internal orientation in locus of control [6, 10]. This pattern was replicated in the current sample—80% of men demonstrated an internal locus of control, while among women, the distribution between internal and external orientation was evenly balanced. This tendency can be explained by differences in social and role expectations: men often perceive their work achievements as a direct outcome of their personal efforts, whereas women tend to be more attuned to external factors such as organizational climate, interpersonal relationships, and managerial support. Consequently, these orientations influence behaviour—men with an internal locus of control are more likely to take initiative, express opinions, and advocate for ideas, while women with an external locus may exhibit greater collaboration and adaptability, though sometimes accompanied by a degree of reliance on external validation or support.
Regarding age differences, the established trend—72.73% of participants over 40 years demonstrating an internal locus of control—suggests that with accumulated life and professional experience, individuals develop a more stable sense of control and competence. Such employees tend to display higher autonomy, decision-making stability, and confidence when facing challenges. In contrast, younger participants (under 40) showed relatively

balanced proportions between internal and external orientations, which can be attributed to their stage of professional development, where external evaluations and feedback play a more prominent role.

The conclusions drawn from the obtained results can be summarized as follows:
Predominance of Internal Locus of Control: 65% of all participants demonstrated an internal locus of control. This indicates that the majority believe that success and failure in their work depend primarily on their own efforts, abilities, and decisions.
Positive Impact on Organizational Effectiveness: Employees with an internal locus of control tend to be more proactive, responsible, and motivated to achieve results. This suggests that the organization possesses strong potential for self-regulation, engagement, and autonomy in task performance.

Presence of a Significant Group with External Locus of Control (35%): A considerable proportion of employees attribute their success or failure to external factors such as chance, luck, or managerial influence. This tendency may lead to lower initiative, dependence on instructions, and difficulties in making independent decisions.
Need for Managerial Interventions: The results highlight the potential to further develop an internal locus of control through organizational policies focused on support, feedback, training, and the encouragement of personal responsibility.

Thus, the study not only confirms the significance of the locus of control as a personality predictor but also outlines specific organizational strategies for applying this construct in human capital management.

5. Conclusion

The reasons for the predominance of an internal locus of control within the studied organization are likely multifaceted. On one hand, this may reflect an organizational culture that encourages initiative, accountability, and personal responsibility—factors that reinforce an internal orientation. On the other hand, the structure of work processes and performance evaluation systems may promote the belief that individual efforts lead directly to tangible achievements.
At the same time, the presence of a relatively large group with an external locus of control (35%) suggests that some employees perceive their results as dependent on external circumstances—such as leadership, luck, or organizational conditions—or that they possess lower confidence in their own influence over outcomes. This may negatively affect initiative and professional autonomy. Therefore, targeted work with this group is essential to foster greater self-confidence and proactivity.
The results also point to the need for managerial interventions aimed at enhancing employees' self-efficacy and internal control orientation. Possible directions include:
Providing regular feedback and opportunities for participation in decision-making discussions;
Conducting training sessions on self-awareness and personal responsibility to strengthen internal control beliefs;
Implementing recognition and reward systems based on individual effort and performance;
Reviewing work processes to reduce perceptions of external control and dependency.
The overall conclusion drawn from the study is that the organization is dominated by individuals with an internal locus of control, which is a positive indicator of organizational culture and employee motivation. The prevailing sense of personal responsibility and control over outcomes can serve as a foundation for developing more effective management policies and leadership capacities.
An environment that encourages autonomy, creativity, and constructive feedback can further reinforce these attitudes and support both personal and professional growth. Optimal development of organizational culture can be achieved through purposeful managerial and training strategies aimed at strengthening internal control beliefs. Such strategies include fostering a supportive work environment, providing developmental feedback, creating opportunities for professional advancement, and establishing systems that recognize individual achievements.
In this regard, the locus of control emerges as a significant psychological determinant of organizational behavior, influencing both individual effectiveness and the overall dynamics of the organization.

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