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**THE MEDIATING ROLE OF INNOVATIVE WORK BEHAVIORS BETWEEN
INTRAPRENEURIAL CLIMATE AND ORGANIZATIONAL INNOVATIVENESS:
AN EMPIRICAL STUDY**

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ÖZET

Günümüzde yerel ve küresel ölçekte artan rekabet; hem arařtırmacıları hem de bunu yakından hisseden firmaları başarı kültürünü nasıl yaratacakları ve bunu nasıl devam ettirebilecekleri konusunda düşünmeye itmiştir. Bu yüzden kurumsal girişimcilik ve bunun yenilikçi sonuçları önem verilen ve arařtırılan konular haline gelmiştir.

Kurumsal girişimcilik ve örgütsel yenilikçilik alanındaki literatür, yönetimin yetkinliđi ve yenilikçi fikirler ile projelerin yolunu açan etkin bir sistemin oluşması için kullanılabilecek yöntemlerin sebep ve sonuçları üzerine gelişmiştir. Ancak, sistemin mozaigini oluşturan yenilikçi fikir ve projelerin sahipleri, yani çalışanların davranışları çok az çalışmada detaylıca incelenmiştir.

Bu bağlamda, yönetim tarafından kullanılan ve yenilik odaklı bir iklimi tetikleyen unsurlar literatürde yönetimin desteđi, tahsis edilen zaman, yönetsel özgürlük ve özeklik, etkin bir ödül sistemi ve riski özümseyebilme kapasitesi olarak yer almaktadır.

Bütün bunlar göz önünde bulundurularak, bu çalışma yenilikçi davranışların, kurumsal girişimciliđin firma performansına etkilerini ne yönde deđiştirebildiđini analiz etme amacı taşımaktadır. Önceki literatürde eksik kaldıđı düşünölen önemli bir noktayı tamamlamak amacıyla; yenilikçi davranışları fikir üretme, geliştirme ve gerçekleştirme olarak çalışmanın merkezine koymuştur. Ayrıca sisteme karşı olmak yerine onu korumayı hedefleyen ve statükocu davranışlar olarak nitelendirilebilecek erdemli davranışların da iklimsel faktörlerle nasıl bir etkileşim içinde olduđu ve bunun sisteme karşı gerçekleştirilen yenilikçi davranışlara nasıl yansıdıđı arařtırılmıştır.

Bütün bu faktörlerin bir araya gelerek firma için oluşturulan katma deđer; firmanın yenilikçilik, yeni ürün, imalat açısından ve finansal açılardan ne noktada

olduğunun değerlendirilmesi ile açığa çıkacağından, hem niteliksel hem de nicelik açısından performans ele alınmıştır.

Kurumsal girişimcilik ikliminin çok boyutlu ele alındığı, yenilik ve örgütsel vatandaşlığın da içinde bulunduğu önceki kavramsal ve ampirik çalışmalar ile bu konuda yürütülmüş saha çalışmalarının sonuçlarına dayalı olarak geliştirilen bu çalışma, İzmir’de bulunan Ege Serbest Bölge ile 3 organize sanayi bölgesinde konuşlanmış, imalat yapan 45 firmadan herhangi bir sektörel sınırlama olmaksızın, her kademedeki 199 kişi üzerinde gerçekleştirilmiştir.

Araştırmanın hipotezlerini test etmek amacıyla yapılan regresyon analizleri sonucunda hemen her açıdan gerçekleşen yönetim desteğinin ve yenilik performansına bağlı olarak yürütülen etkin ödül sisteminin çalışanların sahip olacağı erdemle birleştiğinde, yenilikçi davranışların ortaya çıkmasına yol açtığı sonucuna ulaşılmıştır. Buna ek olarak; bu davranışların firmaya yenilikçilik, imalat, yeni ürün ve finansal anlamda katma değer yarattığı ortaya çıkmıştır.

Anahtar Kelimeler: İç girişimcilik iklimi, yenilikçi davranışlar, yenilikçilik performansı.

ABSTRACT

Increasing competitiveness both in global and domestic markets has led both academicians and corporations to investigate how to create and sustain a climate and culture of success. Therefore, corporate entrepreneurship (intrapreneurship) and its innovative consequences have become primary study areas.

The literature on intrapreneurship and organizational innovativeness has focused on the managerial competencies and managerial tools necessary to achieve effective managerial systems which lead to successful innovative ideas. However, innovative behaviors of employees who are the essence of organizations and the main source of creativity and innovative ideas and /or projects have not been studied separately. In the literature there are five managerial tools that are needed to support an innovation oriented intrapreneurial climate; namely (1) management support, (2) time availability, (3) individual freedom and autonomy, (4) reward availability/reinforcement (5) management's and employees' absorption capacity of risk.

In this respect, this study aims to find how to innovative work behaviors mediate the performance impacts of intrapreneurship. As to the contribution of this study to the current literature, it took as a central focus the innovative work behaviors of employees, with its multidimensional structure of idea generation, idea promotion and idea realization, as a mediator factor between intrapreneurial climate and firms' performance. Besides the innovative work behaviors, the study also focused on the interactive effect of civic virtue as one of the promotive- affiliative types of employee behavior seeking to preserve the ongoing system, and the manipulation tools of change, on the frequency of occurrences of innovative types of behavior.

In order to evaluate the added value of these types of behaviors, performance was measured both by qualitative and quantitative aspects, so innovative, new product, manufacturing and financial criteria were selected to explore the effects of innovative work behaviors.

The sample of this study which are based on the in depth review of corporate entrepreneurship, innovation and organizational citizenship behaviors literature, is made up of 199 respondents from 45 different firms from three organized industrial zones located in Izmir and Aegean Free Zone without any industrial limitations. The respondents of this study were the employees of manufacturing firms from all hierarchical levels.

The results of regression analyses have indicated that the intrapreneurial climate aspects of management support and reward availability couple with civic virtue are strong drivers of Innovative Work Behaviors (IWBs), these types of behaviors are in turn effective instruments for the Innovative Performance of the firms, which leads in turn to effective functioning of the organization in terms of manufacturing, new product introduction and financial health.

Key words: Intrapreneurial climate, innovative work behavior, innovative performance.

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LIST OF ABBREVIATIONS

OCB: Organizational Citizenship Behaviors

IWBs: Innovative Work Behaviors

IAOIZ: Izmir Ataturk Organized Industrial Zone

CEAI: Corporate Entrepreneurship Assessment Instrument

PCA: Principal Component Analysis

ICC: Intra Class Correlation

CONT'D: Continued

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1. INTRODUCTION

In today's highly dynamic and innovation based competitive environments; corporations are forced to develop distinctive employee skills and competencies which are difficult to replicate or to imitate by competitors. This could be achieved, as Resource-based views suggests, by developing, deploying and protecting intangible assets. Internal corporate entrepreneurship (intrapreneurship) plays the key role in gaining and sustaining the competitive advantage underlying sustainable rejuvenation of the organization's ultimate performance.

The main concerns of intrapreneurship are more with the emergent activities and the orientations that represent departures from the customs -that may or may not be a product or technological innovation- as well as changes in strategy and organizing, risk taking, and proactive, aggressive posturing. The character of intrapreneurship necessitates corporations to be proactive so as to be future oriented, to be aggressive by keeping pace with new trends, to create new businesses within existing organizations (Stopford and Badenfuller, 1994: 522; Antoncic and Hisrich, 2001: 498, 2003: 16) to redefine the company's products or services and/or to develop new markets (Antoncic and Hisrich, 2001: 498), the transformation of organizations through the renewal of key ideas on which the organization is built and to reinvent itself by product/service, and technological innovations.

Intrapreneurship is a multidimensional process with many forces acting in harmony that lead to the implementation of an innovative idea and facilitation of organizational progression from troubled bureaucracy to a more responsive meritocracy (Hornsby, Naffziger, Kuratko and Montagno, 1993: 30; Pearce, Kramer and Robbins, 1997:21).

Thus, innovativeness is an important component of intrapreneurial strategy and thus entrepreneurial orientation, because it reflects an important means by which firms pursue new opportunities (Lumpkin and Dess, 1996: 142-144; Antoncic and Hisrich, 2001:497-500; 2003:16-17).

Innovation, including its capacity to make software, (Neely and Hii, 1998:3) is important in today's global competition which drives rapid technological changes. Innovation however, is not only an individual phenomenon, but also often requires bringing people in different roles working together to be successful (Galbraith, 1999: 7-8). As a multistage process, innovation requires different activities and different individual behaviors at each stage (Scott and Bruce, 1994:581). As Janssen proposed; these individual behaviors consist of three phases: idea generation, idea promotion and idea realization (Janssen, 2000: 288, 2003: 348, 2004: 202; Scott and Bruce 1994: 581-582). These phases are labeled as Innovative Work Behaviors (hereafter IWBs) in the literature which are also regarded as the significant manifestation of promotive - challenging types of extra-role behaviors and indicate the extended job-breadth.

IWBs are not specified in the job descriptions, not recognized by formal reward systems and do not result in punitive consequences (Van Dyne and Le Pine 1998:108; Janssen, 2000:288). Therefore, the other types of extra-role behaviors especially having promotive- affiliative characters that are designed to improve a task performance by maintaining and enhancing existing working relationships and task procedures (Van Dyne and Le Pine, 1998:108-109) are highly associated with IWBs and they have a potential in affecting the strength of the relationship between IWBs and its antecedents.

A full understanding of creativity and IWBs in complex social settings also requires one to go beyond a focus on individual actors and to carefully examine the situational context within which these types of behaviors take place because individual characteristics interact with social and contextual influence processes (Woodman, Sawyer and Griffin, 1993:293,298,310-312). In these influence processes, person's immediate corporate social environment is one of the important sources of information (Pfeffer and Salancik, 1978:226; Woodman et al., 1993:303-304) because individuals, as adaptive organisms, adapt attitudes, behaviors and beliefs to their social context and to the reality of their own past and present behavior and situation.

Thus the firms whose major concern is to attain the distinctive competences which are difficult to replicate or imitate need to evaluate capabilities not only in terms of balance sheet items, but mainly in terms of organizational structures and managerial processes which support change-oriented behaviors or more specifically IWBs (Teece and Pisano, 1994).

The factors affecting climate perceptions of employees regarding intrapreneurship refers to the possible managerial tools used in these managerial processes or arrangements made to create a suitable atmosphere for IWBs and to affect overall innovativeness. Management support, time availability, individual freedom and autonomy, reward availability/reinforcement, management's and employees' absorption capacity of risk are accepted as valid determinants of intrapreneurial climate in the literature and used in many studies exploring their causes and effects (e.g. Kuratko, Montagno and Hornsby, 1990; Hornsby, Naffziger, Kuratko and Montagno, 1993; Antoncic and Hisrich, 2001; Hornsby, Kuratko and Zahra, 2002; McLean, 2005; Hornsby, Kuratko, Shepherd and Bott, 2009; Alpkan, Bulut, Günday, Ulusoy, and Kılıç, 2009).

The main purpose of this study is to analyze the effects of Intrapreneurial Climate constituents on IWBs and the combined effects of them on Innovative Performance which serves as a feedback on a firms' innovativeness ranking. Innovativeness refers an organization's capacity to innovate (Tuominen, Rajala and Möller, 2004: 497) or the firm's ability to create novel and appropriate ideas and turn them into useful applications in the market place (Ergün, Bulut, Alpkan and Çakar, 2004: 260). Innovative Performance and its relationship with the manufacturing performance, new product performance and financial aspects of performance is examined to determine the gaps between expected outcomes and actual indicators which trigger a systematic process of continuous improvement (Neely and Hii, 1998:40). In order to test the effect of civic virtue as a promotive-affiliative form of behavior in changing the direction of the relations or in changing the character of the relations by having a strengthening or weakening effects, it is given a moderator status.

This study endeavors to reveal the impacts of socially constructed intrapreneurship factors on Turkish people's perceptions of supportive atmosphere, initiation of change, increased willingness to continue creative efforts and increased success of implementation efforts (Ford, 1996: 1123; Mumford, Scott, Gaddis and Strange, 2002: 732). Since management in general place a value on creativity and innovation, if they, more specifically, have a sense of pride in organization's members and enthusiasm about what they are capable of doing, employees' motivation towards innovation will increase because employees love what they do due to the environment that allows them to retain intrinsic motivational focus (Amabile, 1997: 52, 55).

In terms of its contribution to the literature and giving effective managerial tools in a holistic manner which could be used by Turkish companies later, this study explores the potential relationship between Intrapreneurial Climate, IWBs and performance. To this end, the chain between these antecedents and consequences are constructed regarding to the Turkish companies without any industrial limitations to build an enduring environment of human communities striving towards innovation (Ahmed, 1998: 43).

The chain is constructed of the following parts: In the first part, background information based upon the deep literature review and constructed model is given. Creativity and innovation definitions, obtrusive distinctions between them and their combined contribution to the overall process of idea generation, promotion and implementation are analyzed. In the subpart of antecedents of IWBs, the definition and dimensions of Intrapreneurship, the concepts of climate and culture as the building blocks of internal environment, and specific managerial tools which are accepted as valid determinants are scrutinized. The second part deals with the consequences of IWBs, especially the Innovative Performance and its relationship with the other constituents of performance. In the third part, research methodology is discussed in detail. Later, findings are given and results are discussed in an integrated manner. In the conclusion, results of overall analysis are explained briefly, limitations are enumerated and managerial and future implications are given.

2. INNOVATIVE WORK BEHAVIOR: BACKGROUND INFORMATION AND MODEL CONSTRUCTION

2.1. CREATIVITY AND INNOVATION

Entrepreneurship refers to the process starting from the idea generation to the product or the service realization to the risk management (Bamber and Owens, 2002: 203). Thus, this process places a premium on creativity and innovation - concrete output of a creative thought - and treats innovation as an entrepreneurial act (Sharma and Chrisman, 1999:92). These two terms are important in today's competition on a global scale, which leads to rapid technological changes, because they have a capacity to make software which is a procedure or know-how of executing a task. (Neely and Hii, 1998:3). That is why creativity and innovation have come to be seen as key goals of many organizations and as potentially powerful influences on organizational performance (Mumford, Scott, Gaddis and Strange, 2002: 705).

The terms, "*creativity*" and "*innovation*" are so closely linked in people's minds that are often used interchangeably (Ford, 1996: 1112; Scott and Bruce, 1994: 581), but making a distinction between creativity and innovation is critical to understanding the overall process.

In the literature there are several definitions and distinctions made between creativity and innovation. The concept of creativity is defined as the generation of novel (i.e., original, unexpected) and appropriate (i.e., useful, adaptive) ideas for products, services, processes and procedures by the complex mosaic of individuals and groups in a specific organizational context (Woodman, Sawyer and Griffin, 1993: 293; Amabile, 1997: 40; Martins and Terblanche, 2003: 67; McLean, 2005: 227). The term "*novel*" indicates the difference from what's been done before and "*appropriate*" means congruity to the problem or the opportunity presented (Amabile, 1997: 40). Yet, creativity needs to satisfy another condition: that these ideas for products, services, procedures and processes are relevant for, or useful to an organization (Oldham and Cummings, 1996: 608).

Another attempt to define creativity with three important attributes implies that creativity is a domain specific and subjective judgment of the novelty and the value of an outcome of a particular action (Ford, 1996: 115).

Innovation, on the other hand, is about the process of developing and implementing a new idea (Mc Lean, 2005:227). In other words, innovation encompasses the generation, development and implementation of new ideas (Damanpour, 1991: 556; Hornsby, Kuratko and Zahra, 2002: 255). Creativity is the first step in this process so it is regarded as the overall starting point. Thus, innovation cannot be realized without including creativity within this process (McLean, 2005: 227). Furthermore, creativity is considered to be a subset of the broader domain of innovation (Woodman et al., 1993: 293). However, creativity is necessary but it is not a sufficient condition for the innovation, because a successful innovation depends on other factors as well, and it does not stem only from the creative ideas that originate within an organization but also from the ideas that originate elsewhere (Scott and Bruce; 1994:581; Amabile, Conti, Coon, Lazenby and Herron, 1996: 1155; Mc Lean, 2005: 227).

As stated in another definition, innovation is a mean of changing an organization internally in order to respond to the changes (e.g. technological, economic, and social) in its external environment. It may also result from the proactive stance held to influence an environment (Damanpour, 1991: 556; Gopalakrishnan, 2000: 137). In a broad sense, innovation is an organization's capacity to change and to continuously reinvent itself (Schneider, Gunnarson and Jolly, 1994: 20). This association with change should be interpreted cautiously because change does not always involve new ideas or lead to improvement in an organization (Martins and Terblanche, 2003: 67).

The difference between the two concepts also occurs at the level of analysis. In this context, creativity is mostly seen as a phenomenon that is initiated and exhibited at the individual level but this point of view limits the role of creativity in the innovation research.

On the other hand, innovation seems to operate better at the group and organization levels (Mc Lean, 2005: 228; Ford, 1996: 1112, 1113). Besides being studied at organizational levels, it is even studied at regional or national levels (Neely and Hii, 1998: 15-21).

These definitions and distinctions show that even though they are different; creativity and innovation are complementing each other. Creative ideas are analogous to fuel feeding the innovation pipeline (Neely and Hii, 1998: 4; McLean, 2005: 240). Thus, innovation is not possible without the creative processes: identifying the important problems and opportunities, gathering information, generating new ideas and exploring the validity of those ideas (Mc Lean, 2005: 227).

Innovation is not only an individual phenomenon but also it brings people in different roles together working towards a successful outcome (Galbraith, 1999: 7-8). As a multistage process, innovation requires different activities and different individual behaviors at each stage (Scott and Bruce, 1994:581).

In the literature, there are several concepts used to explain this multistage process. The different roles that are necessary for innovation have been explained by Galbraith as an idea champion, a sponsor and a leader role (Galbraith, 1999: 7-8). Another study has explained innovation as three fairly distinct phases: idea generation, structured methodology and commercialization (Ahmed, 1998: 30). Sharing the same perspective but explaining innovation in terms of behaviors-innovative work behaviors by using different concepts, Janssen has proposed that innovative work behavior (thereafter IWB) is a behavior consisting of idea generation, idea promotion and idea realization stages (Janssen, 2000: 288, 2003: 348, 2004: 202; Scott and Bruce 1994: 581-582). In another study, idea structuring is included into the concept of IWB (Mumford et al., 2002: 739). In addition, Damanpour has defined the overall process upon the findings of two-stage conceptualization: initiation stage and implementation stage (Damanpour, 1991:562).

Innovative Work Behaviors encompasses all the explanations stated above, whether the explanation describes the generally accepted behaviors called innovative

as stages, phases, roles, etc. That's why Innovative Work Behaviors (IWBs) are chosen as the basis of this study.

2.1.1. Idea Generation-Idea Promotion-Idea Implementation:

Innovation process begins with the *idea generation* that is the production of novel and useful ideas in any domain (Woodman et al., 1993: 250; Janssen 2000: 288, 2004: 202).

The bedrock of innovation is ideas because when an individual has an idea and develops it, it can be made available to others so they can be used simultaneously (unlike physical goods). Ideas also are not subject to the law of diminishing utility (Neely and Hill; 1998: 4). Typically, many ideas from this stage do not progress to the second stage because of problems which emerge from the inappropriateness of these ideas to the strategic direction of the organization (Ahmed, 1998: 30).

Once a worker has generated an idea, he or she engages in social activities to find friends, backers and sponsors for an idea or communicates the idea to potential supporters who provide the necessary support and backing. This second element of the process is the *idea promotion* element (Scott and Bruce, 1994: 582; Janssen, 2000: 288). It involves gathering support from the broader organization for the creative enterprise as a whole as well as implementation of a specific idea or project. The importance of promotion lies in the fact that the support for innovative behaviors insures the necessary resources to carry out the work (Mumford et al., 2002: 739). However, it is likely that the early phases of any creative effort is surrounded by and permeated by politics due to the very nature of the innovation process, which is far more complex than often depicted (Neely and Hii, 1998: 6) given that it requires broad strategic decisions be made within the ambiguity surrounding any new idea. Yet, creative people often have difficulty in communicating their ideas because of their focus on their work and field of expertise rather than on interpersonal communication and building relations among staff so they are not always skilled at easily selling their ideas and getting support for them (Mumford, 2000: 333-336). These two difficulties, politics and lack of social networking (Ford, 1996: 1124), create a challenging situation for the adoption and investment in these new ideas.

Moreover, a worker performing innovative behaviors runs the risk of falling into conflict with co-workers. People resist change due to insecurity, uncertainty, stress, the built in tendency to revert to known behaviors, cognitive biases and the commitment to the established framework of previous practices, (Janssen, 2003: 348-350) and thus are likely to prevent change from happening.

Innovators are deemed to be in a position to implement an idea when they have succeed in building connections, have overcoming the politically created challenges, and have acquiring the necessary resources. Adopting an open-communication policy between individuals, teams and departments provides new perspectives and constructs, supporting a culture of creativity and innovation (Martins and Terblanche, 2003: 73). The initiation stage consists of all activities pertaining to problem perception, information gathering, attitude formation, evaluation and resource attainment. Once these are accomplished then the second stage, the implementation stage, is started (Damanpour, 1991: 562). In the third stage, the innovative individual completes the idea by producing a prototype or model of innovation that can be diffused, mass-produced, turned to productive use or institutionalized (Scott and Bruce, 1994: 582). In other words, this final phase refers the *realization or commercialization of the idea*. This phase is of turning the idea into an operational feasibility (Scott and Bruce, 1994: 582; Ahmed, 1998:30; Janssen, 2000: 288).

All in all, innovation is the process of *discovery* - idea generation after the identification of opportunities and problems, gathering information, generating new ideas and exploring the validity of them, *diffusion* - another name of idea promotion in which knowledge is distributed throughout the organization to gain supporters of the idea (Honig, 2001: 23) and *action* - realization/commercialization of the idea. In this multi stage process, ideas are captured, filtered, funded, developed, modified, clarified and eventually commercialized (Mc Lean, 2005: 240). The combined effect of these is the creation of a strategic value for an organization in a rapidly changing and competitive environment.

Innovative work behaviors are also analyzed in terms of extra-role behaviors which are not specified before by role prescriptions, not recognized by formal reward

systems and do not result in punitive consequences (Van Dyne and Le Pine 1998: 108; Janssen, 2000: 288) . These types of behaviors are discretionary on the part of the employee and lead to the effective functioning of the organization independent of person's objective productivity (Podsakoff, Mackenzie, Paine and Bachrach, 2000: 513; Vey and Campbell, 2004: 131). Therefore, extra-role behaviors are highly associated with IWBs and they have a potential in affecting the relationship between IWBs and antecedents.

2.2. EXTRA-ROLE BEHAVIORS

In practice, organizations need employees who are willing to exceed their formal job requirements. Although exceeding job requirements is commonly referred to as organizational citizenship behaviors (OCB), which imply employee contributions not inherent in formal job requirements, it is also explained by using different terms having the same features such as *prosocial behaviors*, *spontaneous behaviors*, *contextual behaviors* or *extra-role behaviors* (Pearce and Gregersen, 1991:1-7; Morrison 1994: 403-419; Mac Kenzie, Podsakoff and Ahearne, 1998: 87-98).

OCB, the mostly examined types of behaviors exceeding job requirements, was defined as an “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system and that in the aggregate promotes the effective functioning of the organization” by Organ (Podsakoff et al., 2000: 513). Even though everything seems to be clear from this definition, there are related problems which received many negative comments from Morrison, which then compelled Organ to rethink and redefine the characteristics of OCB by emphasizing the important concepts within this definition in 1997 as *three soft spots*: discretionary, non contractual rewards and organizational effectiveness.

First of all, Organ clarified the discretionary aspect of these types of behaviors by emphasizing the choice of an employee to exceed his/her perceived job-breadth (Morrison, 1994: 1544-1565). He continued to explain what has to be understood from “non contractual rewards”. It does not mean that OCB must be limited to those gestures that are lacking in any tangible return to individual; rather,

over time a series of different OCB types could create a good impression on supervisors or coworkers and this impression could influence the recommendation for a salary increase or promotion. This clarification revealed the fact that OCB rewards can be indirect and uncertain as compared to the more formal contributions. In regards to organizational effectiveness as a last soft point of Organ's definition, he has assumed that not every single discrete instance of OCB would make a difference in organizational outcomes (Organ, 1997: 86-89).

All in all, the recent focus on extra-role performance stems from the fact that it has been shown to influence evaluations and decisions about promotion, training, and compensation because dynamic environments do not allow anticipation or specification of all desired employee behaviors (Van Dyne and Le Pine; 1998: 108).

2.2.1. Dimensions of extra-role behaviors:

The vast majority of studies of OCB have been devoted to the types of behaviors reinforcing status quo. The main concern has been the affiliative forms of behaviors like *helping, sportsmanship, organizational loyalty, organizational compliance, civic virtue, self-development* (Morrison and Phelps, 1999: 403-419; Podsakoff et al., 2000: 516-526; Graham and Van Dyne; 2006: 89-109; Choi, 2007: 468-469; Nielsen, Bachrach, Sundstorm and Halfhill, 2010: 2-27). Although these extra-role behaviors are important for the effective functioning of the organization, they are not sufficient for survival in the competitive environment. Organizations need employees who are ready to challenge the present state of operations by taking initiative to bring about change rather than maintaining status quo (Morrison and Phelps, 1999: 403). In this direction, the extra-role behaviors are categorized as *promotive affiliative/challenging* and/or *prohibitive affiliative/challenging*. More generally, challenging types are labeled as the change-oriented behaviors which are regarded as constructive efforts by individuals to identify and to implement changes with respect to work methods, policies and procedures to improve the situation within organizations (Bettencourt, 2004: 165-180).

Unlike the cooperative behaviors supporting existing work relationships, change-oriented ones tend to disrupt the interpersonal relations and work processes

(Van Dyne and Le Pine, 1998: 108; Morrison and Phelps, 1999: 415; Janssen 2003: 347-364, 2004: 201-215, Choi, 2007:472).

Promotive- affiliative types are designed to improve a task performance by maintaining and enhancing existing working relationships and task procedures (Van Dyne and Le Pine, 1998: 108-109). They are present oriented and accepting of the status quo. They place emphasis on doing things smoothly and efficiently so their descriptive phrase is “*it is ok*”. However, promotive-challenging types suggest change; they tend to improve the work performance by instilling the idea of doing something in a better way. Hence they are future-oriented (Van Dyne and Le Pine, 1998: 108-109; Choi 2007: 467-468).

An individual initiative as part of a citizenship behavior holds promotive-*challenging* attributes in its very nature (Choi, 2007: 468-469). It is also labeled as an innovative behavior in many studies (i.e Scott and Bruce, 1994; Janssen, 2000, 2003, 2004). These behaviors include the voluntary acts of creativity and innovation designed to improve one’s task or the organization’s performance (Podsakoff et al., 2000:524; Choi, 2007:468).

In this study, rather than focusing only on the depiction of the direct effects of promotive-challenging types of behaviors, civic virtue has been chosen as one of the promotive-affiliative types of behavior to examine in relation to interaction effects on IWBs. Because, it represents a macro-level interest or commitment to the organization as a whole, civic virtue implies responsibilities that employees have as “citizens” of an organization (Podsakoff et al., 2000:525). It is a behavior on the part of an individual that indicates that he/she responsibly participates in, is involved in, or is concerned about the life of the employing organization (Dickinson, 2009:24; Morrison, 1994:1550). This is shown by a willingness to participate actively in a company’s governance such as attending meetings, engaging in policy debates, expressing an opinion about what strategy the organization ought to follow, monitoring the environment for threats and opportunities (e.g., keep up with changes in the industry that might affect the organization); and looking out for the best interests (e.g., reporting fire hazards or suspicious activities, locking doors, etc.) of the company, even at great personal cost. These behaviors reflect a person’s

recognition of being part of a larger whole in the same way that citizens are members of a country and accept the responsibilities which that entails (Podsakoff et al., 2000:525).

In this study, civic virtue is chosen to moderate the relation between intrapreneurial climate and IWBs, because, as it will be shown, without having a sense of belonging, it is impossible to challenge the status-quo and to take any risk to change the ongoing system with innovative initiatives.

The following section researches the factors influencing the whole process of innovative work behavior in detail. While personality, motivation, and expertise are closely related to creativity, which is considered the beginning stage of the process of moving towards the desired end, another consideration is the antecedents of IWBs from the broader perspective including the organizational culture and climate.

2.3. ANTECEDENTS OF IWBs:

The multistage process of creativity and innovation, in other words, is vulnerable to the effects of the organizational context surrounding the work (Mumford et al., 2002:730). An organizational work environment which is strongly subject to managerial influences can make the difference between fostering future-oriented perspectives shared by employees or the continuance of old practices (Amabile, 1997: 51). As Amabile stated in her explanation of Componential Theory of Creativity and Innovation, the social environment influences creativity and the overall process leading to innovation via individual components. The social environment can have a significant effect on a person's level of intrinsic motivation which is driven by deep interest and involvement in the work through curiosity, enjoyment or a personal sense of challenge. This theory explains the effects of even momentary alterations in the work environment on a motivational orientation for a task and the resulting creativity on that task (Amabile, 1997: 44, 52).

In addition to this, the Social Information Processing approach becomes noteworthy through its propositions about the effects of social context and the consequences of a person's past choices in the formation of their attitudes and need

statements. Consistent with the componential model, this approach asserts that one important source of information is the person's immediate social environment (Salancik and Pfeffer, 1978: 224,226; Woodman et al., 1993: 304).

The major concern of firms in today's highly competitive [external] environment is the attainment of distinctive competences which are difficult to replicate or imitate, thus firms are trying to create dynamic capabilities in order to become more adaptive organizations. These capabilities, however, need to be understood not in terms of balance sheet performance, but mainly in terms of organizational structures and managerial processes which support change-oriented behaviors or more specifically IWBs (Teece and Pisano, 1994: 4, 6).

In this study, the model as depicted in Figure 2.1 constitutes the basis of the hypotheses. In this model; the main antecedents of IWBs are articulated as an Intrapreneurial Climate that is made up of several sub-elements. The other important factor is "Civic Virtue" which is assumed to play a moderator role in affecting or changing the direction of the relationship between antecedents and IWBs. Thus, the following section examines the nature of the antecedents of IWB as well as their interaction between themselves and their potential to create an overall supportive social environment.

The model depicted below shows the antecedents and consequences of IWBs as well as the variables that moderate the relationship between Intrapreneurial Climate and IWBs.

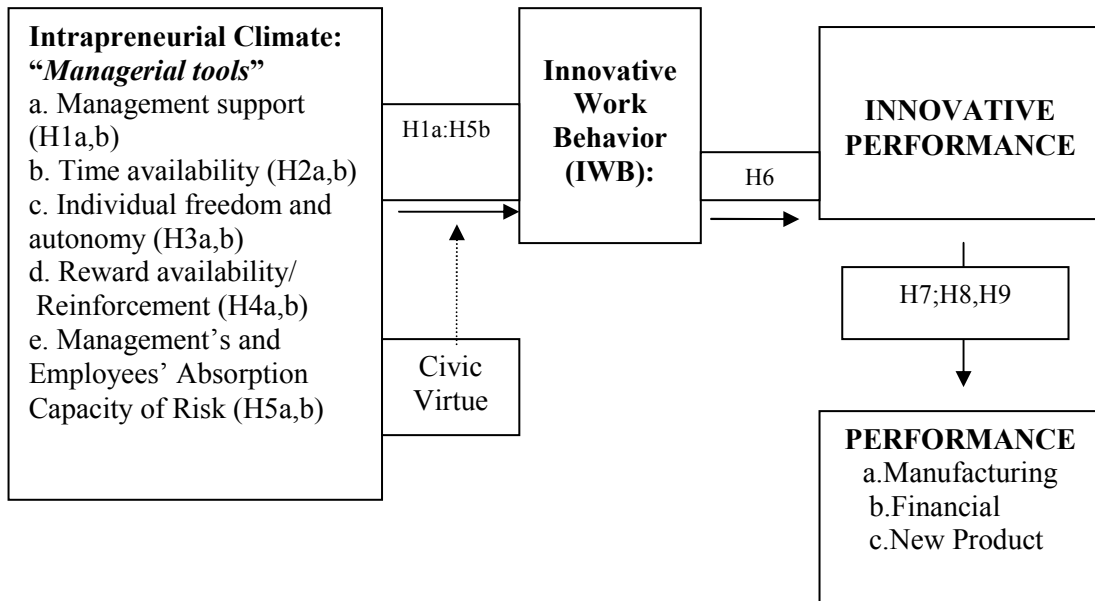


Figure 2.1. Antecedents and Consequence of IWB: Hypothetical Model

2.3.1 Intrapreneurial Climate

In this study, the identified organizational climate is an Intrapreneurial one which is conceptualized as an independent variable, a cause of attitudes or a behavior and is treated as a macro construct (Schneider, 1975: 463; Siegel and Kaemmerer, 1978: 553).

Although the literature lacks a precise definition of entrepreneurship, there has been a consensus on some aspects of it; namely the process of uncovering and developing an opportunity to create value through innovation and the seizing of that opportunity without regards to either the resources or position of the entrepreneur in a new or existing company (Antoncic and Hisrich , 2001: 497 , 2003: 8).

Schumpeter takes a more specific view on entrepreneurship. He believes that the essence of entrepreneurship is innovation and that the carrying out of new combinations is called “enterprise”; the individuals whose function is to carry them out are called “entrepreneurs” so he has described an entrepreneur as “an innovator”. In this way, Schumpeter has made two concepts, entrepreneurship and innovation, almost inseparable. What he has understood by new combinations which cause discontinuity is the introduction of a new good, a new method of production, an

opening of a new market, a conquest of new sources of raw materials or half-manufactured goods, and carrying out the new organization of any industry. Thus, entrepreneurship exists only when new combinations are actually carried out (Stevenson and Jarillo, 1990: 18-22; Neely and Hii, 1998: 10; Sharma and Chrisman, 1999: 85; Bamber and Owens, 2002: 203-204,214; Antoncic and Hisrich, 2003: 9). Most authors, who are in the line with Schumpeter, accept that all types of entrepreneurship are based on the innovations that require changes in the pattern of the resource deployment and the creation of new capabilities to add new possibilities for positioning in markets (Stopford and Baden-Fuller, 1994: 522).

There are variety of terms used for the entrepreneurial efforts within an existing organization such as corporate entrepreneurship, corporate venturing, intrapreneuring, internal corporate entrepreneurship, internal entrepreneurship, strategic renewal and venturing (Sharma and Chrisman, 1999: 86).

Intrapreneurship is considered to be the sub-field of entrepreneurship (Antoncic and Hisrich, 2003: 7) and it is entrepreneurship within an existing organization (Kuratko et al., 1990:50; Antoncic and Hisrich, 2001:497, 2003:9; Bamber and Owens, 2002: 204). Intrapreneurship is a multidimensional process with many forces acting in harmony that lead to the implementation of an innovative idea and facilitation of organizational progression from troubled bureaucracy to a more responsive meritocracy (Hornsby, Naffziger, Kuratko and Montagno, 1993: 30; Pearce, Kramer and Robbins, 1997:21).

While researchers include new business ventures in the definition of intrapreneurship, it refers not only to the creation of new business ventures, but also to other innovative activities and orientations such as development of new products, services, technologies, administrative techniques and competitive postures (Antoncic and Hisrich, 2003:9).

Intrapreneurship is a curious, constantly searching activity which takes place at the frontier, not at the core where the major concern is with existing routines, their repetition and with the efficiency of existing production and support operations. The concept of intrapreneurship is about emergence, creation and newness. It is viewed

as the manifestation of organizational innovative capabilities, also seen as a possible organizational predisposition that may lead to learning and constructing dynamic capabilities easily (Teece and Pisano, 1994: 1-28). The concern of intrapreneurship is more with the emergent activities and the orientations that represent departures from the customs that may or may not be a product or technological innovation as well as changes in strategy and organizing, risk taking, and proactive and aggressive posturing (Antoncic and Hisrich, 2003: 10-14).

Intrapreneurship is divided into four main dimensions plus an additional three each with a different stream of research: *New business venturing*, *innovativeness or product/service and process innovation*, *self renewal* and *proactiveness*. The additional three are; *risk taking*, *competitive aggressiveness* and *autonomy* (Kuratko et al., 1990:51-53; Stopford and Baden-Fuller, 1994: 523; Lumpkin and Dess, 1996: 135-172; Antoncic and Hisrich, 2001: 498-500, 2003: 14-20). Additional ones are also considered to be parts of the main dimensions and included in several writings (e.g. Covin and Slevin 1991; Lumpkin and Dess, 1996; Antoncic and Hisrich, 2003).

For all organizations, *new business venturing*- also labeled as corporate venturing (Sharma and Chrisman, 1999: 93) refers to the creation of new businesses within the existing organization (Stopford and Badenfuller, 1994: 522; Antoncic and Hisrich, 2001: 498, 2003: 16) by redefining the company's products or services and/or by developing new markets (Antoncic and Hisrich, 2001: 498). New ventures indicate the formation of new units or firms and new business refers to entering new businesses without forming new organizational entities (Antoncic and Hisrich, 2003: 16). Moreover, autonomy is explained in the context of new business venturing because it is accepted that an important impetus for new entry activity is the independent spirit necessary to further new ventures (Lumpkin and Dess, 1996: 140). However, this inclusion is criticized by Antoncic and Hisrich who believe that autonomy should be analyzed at the individual as opposed to the firm level.

As another dimension; *self-renewal or organizational renewal or strategic renewal* (Zahra, 1996: 1715) implies the transformation of organizations through the renewal of key ideas on which the organization is built. It encompasses system wide

changes, departure from corporate strategy and the creation of new direction as the organizational renewal part of intrapreneurship (Stopford and Baden-Fuller, 1994: 522; Covin and Slevin, 1997: 56; Antoncic and Hisrich, 2001: 498, 2003: 17). This also indicates an imperative for all organizations to renew its businesses and to achieve adaptability and flexibility in order to exist in the face of rapidly and dramatically changing environment (Antoncic and Hisrich, 2001: 498, 2003: 17; Stopford and Baden-Fuller, 1994: 522; Covin and Slevin, 1997: 56).

Venkatraman defined *proactiveness* in the late 1980s as the reflection of proactive behavior in relation to participation in emerging industries, continuous search for market opportunities and experimentation with the response to changing environmental trends. It also implies processes aimed at anticipating and acting on future needs by seeking new opportunities which may or may not be related to the present line of operations, introduction of new products and brands ahead of competition, as well as strategically eliminating operations which are in the mature or declining stages of their life cycle (Venkatraman, 1988: 949). Other later definitions describe proactiveness as “acting in anticipation of future problems, needs or changes” (Lumpkin and Dess, 1996: 146; Antoncich and Hisrich, 2003: 18). This suggests a forward looking perspective. The proactiveness dimension is related to pioneering initiative taking in the pursuit of new opportunities or entering new markets with an aggressive stance (Antoncic and Hisrich, 2001: 498-499; 2003: 18).

In several writings, the two dimensions of *competitive aggressiveness* and *risk taking* were also included in the overall dimension of *proactiveness* (e.g. Knight, 1997: 214-222) by describing the prospector firms as bold, directive, risk taking opportunity seekers (Antoncic and Hisrich, 2001: 499) . However, it is possible to describe these factors as separate dimensions (Antoncic and Hisrich, 2003: 17-18) by observing the small differences arising from their inclusion.

Competitive aggressiveness refers to how firms relate to competitors; how firms respond to trends and demands that already exist in the market place - building an aggressive relationship with competitors. On the other hand, *proactiveness* signals the seizing initiative and acting opportunistically with an aim of shaping the environment and thus being a leader rather than a follower. Risk taking as the

possibility of incurring loss and the fast commitment of resources in the way of pursuing opportunities (Lumpkin and Dess, 1996: 146-147; Antoncic and Hisrich, 2003: 17; Ergün, Bulut, Alpkın and Çakar, 2004: 260) implies another important quality of proactive firms. Some degree of calculated risk is inherent in the intrapreneurship process (Stopford and Badenfuller, 1994: 523; Lumpkin and Dess, 1996: 144; Antoncic and Hisrich , 2001: 498-499) since the entrepreneurial behaviors constituting the firms entrepreneurial strategic posture entail more risk than conservative behaviors (Covin and Slevin, 1989: 77). As in the case of autonomy, risk taking is analyzed under both the individual and organizational categories.

The last and the most crucial aspect of the overall dimension of *innovativeness* is that of product/service and technological innovativeness. It reflects a firm's tendency to engage in and support new ideas, novelty, experimentation and creative processes that may result in new products, services, and technological processes as well as new administrative techniques. It is an important component of intrapreneurial strategy, and thus entrepreneurial orientation, because it reflects an important means by which firms pursue new opportunities (Lumpkin and Dess, 1996: 142-144; Antoncic and Hisrich , 2001:497-500; 2003:16-17).

A full understanding of creativity and innovative work behavior in complex social settings requires going beyond a focus on individual actors and the careful examination of the situational context within which these types of behaviors take place, because individual characteristics interact with and occur within the influence of social and contextual processes (Woodman et al., 1993:293, 298, 310-312).

Individuals, as adaptive organisms, adapt attitudes, behaviors and beliefs to their social context and to the reality of their own past and present behavior and situation. A person's immediate social environment is one of the important sources of information (Salancik and Pfeffer, 1978: 226; Woodman et al., 1993: 303-304). The immediate social environment provides verbal and non-verbal cues which individuals use to construct and interpret events. Also, it provides information about what a person's attitudes and opinions should be (Salancik and Pfeffer, 1978: 226). The social environment provides several points of inferences to employees about the

valuable factors in the work place and evaluation of those factors in relation to their current situation (Salancik and Pfeffer, 1978: 226,233; Woodman et al., 1993: 303-304).

People apprehend order in their work world based on the perceived and inferred cues and behave in ways that fit the order they apprehend; this apprehension of order constitutes climate perceptions (Schneider, 1975: 448).

Climate is a set of characteristics specific to an organization that can be ascertained from the way in which it relates to its members and to its environment (Siegel and Kaemmerer, 1978: 553). It also refers the feeling in the air one gets from walking around a company (Schneider, Gunnarson and Jolly, 1994: 18).

Climate is also defined as the atmosphere that employees perceive which is created in their organizations by policies, practices, procedures and routines on which the inferences of organizational members are based (Schneider et al., 1994:18; Schneider, Brief and Guzzo, 1996:1). It is the manifestation of practices and patterns of behavior rooted in assumptions, meanings, values and beliefs that make up the culture (McLean, 2005: 229).

Climate and culture are interconnected concepts because employees' values and beliefs- part of the culture- influence their interpretations of organizational policies, practices, procedures and routines (Schneider et al., 1996: 3).

Culture is about deeply held assumptions, deeply seated values, meanings and beliefs (Martins and Terblanche, 2003: 65). It stems from the employee's interpretations of the assumptions, meanings, values and beliefs that produce the climates they experience (Schneider et al., 1994: 18-19; Denison, 1996: 624; McLean 2005: 229). It is a pattern of beliefs and expectations of the members in an organization. These beliefs and expectations produce the norms that powerfully shape behaviors of individuals (O'Reilly, 1989: 12). In reality, culture is the social and normative glue that holds an organization together (Smircich, 1983: 344). It can be also thought of as a potential social control system (O'Reilly, 1989: 10-12).

Schein defined culture in 1992 as “the pattern of basic assumptions that the group learned as it solved problems of external adaptation and internal integration that has worked well enough to be considered valid and therefore to be taught to new members as the correct way to perceive, think and feel in relation to these problems” (McNabb and Sepic, 1995: 373). Schein continues to explain culture as the set of shared, taken for granted implicit assumptions that employees hold and that determines how they perceive, think about and react to various environments. Norms become a fairly visible manifestation of these assumptions. However, behind the norms, these taken for granted set of assumptions lie and most people are not even aware of the culture and never question it (Schein, 1996: 236). Culture manifests itself in symbols, rituals, stories, legends, dramas, language and values (Smircich, 1983: 344; Hofstede, Neuijen, Ohayv and Sanders, 1990: 291; Jex and Britt, 2008: 447-454). These symbols, rituals, stories, legends, dramas, language and values are regarded as practices due to their visibility although their meaning lies in the way they are perceived. On the other hand, the core of culture is formed by shared values in the sense of broad, non-specific feelings that are often unconscious and rarely communicable so they cannot be observed but are manifested in alternatives of behavior (Hofstede et al., 1990: 291).

Culture is created and transmitted mainly through employees sharing their interpretations of events with each other (Schneider et al., 1994: 19). It resides at a deeper level of people’s psychology than climate (Schneider et al., 1996: 5). The beliefs and values are not so directly visible, whereas policies, procedures, practices are observable.

By observing and interpreting the actions of managers, employees are able to explain why things are the way they are and why the organizations focuses on certain priorities (Schneider et al., 1994: 18-19). Individuals are very susceptible to the informational and normative influences of others and learn from them. We watch others and form expectations about how and when we should act (O’Reilly, 1989: 19). In other words, employees try to rationalize their behaviors by referring to the features of the environment which support them, i.e. referring to the management deeds rather than their words. For example, employee’s cultural interpretations might

come to the conclusion that senior managers create a climate for innovation because the managers have given high priority to competitiveness.

Many companies encounter difficulty in changing themselves and adapting to their external environment because of the difficulty in manipulating or changing the prevailing culture and its basic assumptions (Jex and Britt, 2008: 459-461). The root of the challenge is the attainment of new, shared perceptions, beliefs and values (Schneider et al., 1996: 6) such that the organizational members come to know and share some new set of expectations (O'Reilly, 1989: 13).

If culture is rooted in the beliefs and values of founders and key leaders, you cannot retrospectively change the value system espoused in the past, but the rules of the game can be changed through developing new practices by which people are affected (Hofstede et al., 1990: 311; Schneider et al., 1996: 6). Changing practices means manipulating climate reflecting tangibles that produce a culture. Only by altering the everyday policies, practices, procedures and routines, can change occur and be sustained (Schneider et al., 1996: 6). Management actions rather than words are tangibles because employees observe what happens around them and then draw conclusions about the organization's priorities. They later set their own priorities accordingly, and form perceptions about their organization's imperatives which provide them a new direction and orientation about where they should focus their efforts (Schneider et al., 1994: 18-19, 1996: 6, 15).

In summary, climate refers to a situation that is connected to the thoughts, feelings and behaviors of an organization's members, so it is quite logical to consider it to be temporary, and subject to the direct control and manipulation by people with power and influence. On the other hand, culture is the evolved context; it is rooted in history, it is collectively held and it sufficiently resists many attempts at direct manipulation (Denison, 1996: 644).

However, it is a matter of importance to focus employee's energies and competencies on, and directing their behaviors towards, innovative efforts through the appropriate management practices (Schneider et al., 1994: 20). This can only happen through the organization holding an Intrapreneurial climate and culture.

Through socialization process in organizations, individuals learn what behavior is acceptable and how activities should take place. When norms are shared by individuals, they will make assumptions about whether creative and innovative behavior are valued, and these assumptions form the way in which an organization operates. Then, the basic values, assumptions and beliefs are reflected as policies, practices, procedures (Martins and Terblanche, 2003: 67-68). What they are trying to do is to justify or rationalize their behaviors by making reference to the established values (Salancik and Pfeffer, 1978: 231-233).

As Expectancy Theory assumes, when individuals receive signals concerning the organizational expectations for behavior and the potential outcomes of behavior, they use this information to formulate expectancies and instrumentalities. They respond to those expectations by regulating their own behavior in order to get desired outcomes (Scott and Bruce, 1994: 582; Jex and Britt, 2008: 243-246).

If the suitable conditions are created and perceived in the right direction within an organization, IWBs which characterize the creativity and overall innovativeness of an organization could be considered as valuable, and the members are highly likely to embrace these types of behaviors and broaden their job breadth by including these in their formal job requirements. These practices root and grow smoothly within the organization, thereby creating an atmosphere and a culture of innovation.

The possible managerial tools used or arrangements made to create a suitable atmosphere for IWBs and to affect overall innovativeness are: management support, time availability, individual freedom and autonomy, reward availability/reinforcement, and management's and employees' absorption capacity of risk. These tools are accepted as valid determinants of intrapreneurial climate in the literature and are used in many studies exploring their causes and effects (e.g. Kuratko et al., 1990; Hornsby et al., 1993; Antoncic and Hisrich, 2001; Hornsby, Kuratko and Zahra, 2002; McLean, 2005; Hornsby, Kuratko, Shepherd and Bott, 2009; Alpkan et al., 2010).

2.3.1.1. Management support:

The main function of intrapreneurship is offering an alternative, so people engaging in intrapreneurial activity want to change things, spend money, think about long-term problems and opportunities, ask embarrassing questions, challenge authority, and perhaps be disruptive (Fry, 1987: 4). Schumpeter also positioned the entrepreneur whose creative behavior was seen as a “*creative destruction*” in terms of different innovation aspects, as an agent of change (Galbraith, 1999: 9; Antoncic and Hisrich, 2003: 13). Those at the managerial level have a responsibility to know about these aspects of intrapreneurial activity and to take these into account. This consciousness about the nature of innovation and intrapreneurship affects an increase in the level of encouragement given to intrapreneurs and facilitates maintenance of the balance between skepticism and encouragement (Fry, 1987: 6).

The leading innovative organizations are consistently required to creating the culture and the climate that nurture and acknowledge innovation at every level (Ahmed, 1998: 38).

Managers’ concerns about employees’ feelings and needs, encouragement of employees to voice their own concerns, positive and informative feedback and the facilitation of employee skill development define the supportive attitudes of managers necessary as the key and leading mechanisms within a firm. Managers are tasked to facilitate and promote entrepreneurial projects and entrepreneurial behaviors, making the idea generation, development and implementation easier based on the support which they provide on a task and socio emotional basis (Kuratko et al., 1990: 51-57; Hornsby et al., 1993: 30-32 ; Oldham and Cummings, 1996: 611-612; Hornsby et al., 2002: 259-262,269; Amabile, Schatzel, Moneta and Kramer; 2004: 7-9,11-20; Mc Lean 2005: 234-235; Alpkan et al., 2010: 7-8). There are three types of support provided by leaders enforcing both creativity and innovation: idea support, work support and social support (Mumford et al., 2002: 723-724).

The managerial level has several responsibilities: to endorse, refine and shepherd intrapreneurial opportunities as well as to identify, acquire and deploy the resources needed to pursue those opportunities, such that support offered must be in

line with these responsibilities (Kuratko, Ireland, Covin and Hornsby, 2005: 705-707).

The *idea support* entails evaluative feedbacks after initial development of work has been completed, sheltering new ideas waiting for development from initial evaluation of peers, advocating new ideas, and recognizing and rewarding people for their efforts to bring new ideas forward (Hornsby et al., 1993: 32; Mumford et al., 2002: 723-724).

The idea support should be strengthened by the *work or task support* such as providing the necessary resources and equipment, information, man power or expertise for employees (Hornsby et al., 2002: 259; Hornsby, Kuratko, Shepherd and Bott, 2009: 238) to generate and implement the new ideas (Hornsby et al., 1993: 34-35; McLean 2005: 235-237; Alpan et al., 2010: 8; Mumford et al., 2002: 739-740).

On the socio-emotional basis, the leaders can validate the individual's sense of self-worth. They can recognize the value of individual contributions and build feelings of efficacy and competence on the part of employee with regard to innovative efforts. This type of support not only affects or change the perceptions of employees about managers but also their perceptions of themselves, particularly of their competence and the value of what they have done (Mumford et al., 2002: 723-724; Amabile et al., 2004: 26). In this way, they are likely to believe in themselves and in their capabilities to grasp the problem or detect opportunities and to develop alternative solutions to those problems or find feasible ways to take advantage of those opportunities.

Showing consideration for subordinates' feelings, being friendly and personally supportive of them, and being concerned for their welfare (Amabile et al., 2004: 7) are all important manifestations of socio-emotional support.

Commitment from top-management is likely to make finding a sponsorship/advocator easier and to facilitate a great leap forward in innovation (Schneider et al., 1994: 20-21; Antoncic and Hisrich 2001: 502). Gaining the top management support also creates bureaucratic anti-bodies against any resistance

stemming from different perceptions about change (Galbraith, 1999:9). This situation creates an atmosphere of trust between management and employees, even among employees, in terms of discovering opportunities and fostering the willingness to take on the risks of developing and realizing novel or useful ideas and/or projects (Stevenson and Jarillo, 1990: 25; Alpkam et al., 2010: 8). Thus, we can propose that:

Hypothesis 1.a: Management support positively affects IWBs of employees within a firm.

Hypothesis 1.b: The effects of management support on IWBs of employees are moderated when they hold civic virtue within a firm.

2.3.1.2. Time availability:

Time is both considered as a constraint and a resource for generating intrapreneurial outcomes. It is considered as a constraint because it brings change and the change brings need for appropriate transitions (Kuratko et al., 1990: 51-54; Covin and Slevin, 1997: 53-54, 62; Mumford, 2000: 318-319; Hornsby et al., 2002: 259-260; Hornsby et al., 2009: 239). Time is also the most important resource necessary to initiate, develop and implement new projects. Intrapreneurs should know how to use time efficiently and management should be aware of the time requirements needed by employees to think of and create change. Many organizations face the challenge of changing the internal environment in order to adapt to the changes occurring in its external environment. In other words, they struggle to harmonize the changes occurred both in their internal and external environments.

Time availability refers to the sufficiency of time - giving bootleg time (Fry, 1987: 5) to observe, imagine, experiment and develop novel ideas and implement projects (Alpkam et al., 2010: 8). Individuals need to stop and think before they begin working (Mumford, 2000: 318). In this way, they have a chance to free themselves of their daily routines with its otherwise exacting time restraints and strict management oversight which can lead to distrust and burnout (Mc Lean, 2005: 237). On the other hand, unlimited time may not be always beneficial, because it contributes to IWBs up to a point, and positive outcomes will decrease beyond that point. Thus, giving more

time than that which is sufficient takes away the sense of challenge and decreases the possibility of innovative work behaviors. Due to the ambiguous nature of creative efforts, unlimited time may lead people to spend too much effort on pursuing the opportunities that are indeed unprofitable or not consistent with the strategic vision of the organization (Mumford, 2000: 318-319; McLean, 2005: 237). In accordance with this view, giving insufficient time is also detrimental to the innovative thinking. In this situation, employees feel as if they are working under pressure and need to act within the boundaries of directives made from upper management. Additionally, this controlling mechanism, by delineating what has to be done and how it has to be accomplished, leaves no room for autonomy in performing tasks.

Organizations could balance between what is required and what is not by moderating the workload of people to ensure that they have the time needed to pursue innovations. Organizations should avoid putting time constraints on all aspects of an individual's job. Jobs should be structured such that people can work with others to figure out both short and long-term organizational goals and how to solve problems (Hornsby et al., 1993: 32; Kuratko et al., 2005: 703). On the basis of this understanding, these hypotheses follow:

Hypothesis 2.a: The allocation of free time to employees positively affects their IWBs.

Hypothesis 2.b: The effects of allocation of free time to employees on their IWBs are moderated when they hold civic virtue within a firm.

2.3.1.3. Individual freedom and autonomy:

Individual freedom and autonomy implies the decision making latitude in defining and executing one's own work that are believed and scientifically approved essential for innovative behavior (Scott and Bruce, 1994: 584; Ahmed, 1998: 37; Kuratko et al., 2005: 703; Hornsby et al., 2009: 238-239).

If people feel that they have been given a lot of rope (Fry, 1987: 9) to generate and develop the ideas, to choose processes and procedures with which they work, they do not limit themselves to the application of standard solutions to the

problems or decorous responses to the opportunities. They commit themselves to produce original solutions and pursue different avenues for future development because this situation creates “*capability beliefs*” which are people’s expectations regarding their abilities to successfully undertake creative action (Siegel and Kaemmerer, 1978: 554; Burgelman, 1983: 1354-1355; Ford, 1996: 1121).

That’s why, all members could be encouraged to function creatively and look at the problems from a wider perspective outside their jobs (Hornsby et al., 1993: 32) through diffusion of power throughout the system by which synergy (Burgelman, 1983: 1354) could be achieved. Having standard procedures, heavily dependence on narrow job descriptions and rigid standards of performance (Hornsby et al., 1993: 32) are highly likely to be detrimental to the creativity and other stages of innovation although allowing a considerable degree of freedom or autonomy in the conduct of one’s work has not gained strong support in several studies (e.g. Amabile, 1997).

Intrapreneurs want to make radical changes by doing things differently (Oldham and Cummings, 1996: 628) and they challenge the prescribed rules so they tend to be disruptive in this sense. They are also internally driven to prove their idea or solve their problem and ruled by a passionate desire to put their own fingerprints on what they are doing (Galbraith, 1999: 15). Only individuals, who are independently minded, challenge the status-quo and push the limits to promote and execute the novel and useful ideas instead of allowing the organizational bureaucracy to inhibit them. This independent spirit need to act freely to make the key decisions and proceed on to a certain extent (Lumpkin and Dess, 1996: 140-142; Ahmed, 1998: 35; Mc Lean, 2005: 237).

High level of decentralization (Alpkan et al., 2010: 8-9) within the organization structure and the determined means by incumbents to achieve strategic goals often enhance people’s creativity. The critical factor is the extent of the clearly communicated goals for creativity and innovation and standards for fulfilling those goals. When goals are emphasized, employees know what goals to go after, and means could be left to the discretion of employees (McLean, 2005: 234) so autonomy could be granted in selecting the work to pursue in the direction of

strategic goals and in determining procedures under which it is pursued (Mumford, 2000: 326; Martins and Terblanche; 2003: 70-71).

Besides autonomy, some degree of control is needed but both overly loose and overly tight control has been found an inhibiting factor for innovation. An overly tight organizational structure or an excessive oversight (Kuratko et al., 2005: 703; Hornsby et al., 2009: 238-239) creates a controlling style of management rather than empowerment (Ahmed, 1998: 39; Martins and Terblanche, 2003: 71), contrarily overly loose one prevents any effort from regulating the system. The moderate levels of autonomy coupling with high levels of productivity and motivation to make decisions and implement them is required (Mumford et al., 2002; 724).

Key attributes of this type of organizational structure facilitating innovation activities is giving decision making responsibility at lower levels, application of decentralized procedures, providing freedom to act, believing in the individual's ability to create substantial change, delegation of power to a certain extent, creating quick and flexible decision making mechanisms by minimizing bureaucracy (Ahmed, 1998: 38).

Need Based Theories premises that if this type of structure is achieved, individuals having a high need of achievement accept the responsibilities of what have been done instead of blaming anybody else when their attempts end with failure which is undesired but possible outcome due to very nature of the innovation process. Only under these circumstances, individuals can think, act and afford to risk more for innovative consequences (Alpkan et al., 2010: 9). Therefore other hypotheses are as follows:

Hypothesis 3.a: Autonomy given to employees positively affects their IWBs within a firm.

Hypothesis 3.b: The effects of autonomy given to employees on their IWBs are moderated when they hold civic virtue within a firm.

2.3.1.4. Reward availability/Reinforcement:

Appropriate use of rewards and reinforcement refer to the extent of which employees perceive that rewards and evaluations are allocated on the basis of creativity and innovative results (Kuratko et al., 1990: 52; Hornsby et al., 1993: 30; Hornsby et al., 2002: 259; McLean, 2005: 234-235; Hornsby et al., 2009: 239). It also describes a system where reward is contingent upon innovative performance (Hornsby et al., 1993: 32) and which highlights significant achievements and encourages the pursuit of challenging work.

Innovative work behavior involves the definition of a problem or discovery of opportunities, gathering information, and the refining and extension of the initial ideas to permit successful implementation (Mumford et al., 2002: 709). This process is full of difficulties in terms of finding novel and appropriate ideas, gaining support after initial development, implementation and attaining innovative output as a concrete result in the market place. All of these activities are demanding and time consuming, so employees who are motivated internally to engage in these types of behaviors contribute their time and efforts, in other words they invest their “*sweat equity*” (Galbraith, 1999: 14; Mumford et al., 2002: 709). Thus, it is logical to assume that they deserve additional tangible and intangible/psychological (Kuratko et al., 2005: 707) rewards for the extra efforts and additional risks they take on. Due to the very high payoff for the successful innovative firms, the managerial level is expected to devise ways of rewarding the accomplishments of incumbents (Burgelman, 1983: 1362).

Outcomes are either *intrinsic*, which center on the satisfaction individuals received as a result of generating, promoting and implementing their ideas as well as from being more in control of their destiny and from having ultimate responsibility for the success of projects, or *extrinsic*, which implies tangible earnings that are made possible by the firm’s financial performance (Kuratko et al., 2005: 707-708).

If tangible rewards or extrinsic motivators like bonuses, pay increases, awards and promotions combine synergistically with intrinsic ones like greater autonomy, additional development opportunities for personal and professional

growth, recognition and approval, they are likely to enhance the positive effects of intrinsic ones which is conducive to creativity (O'Reilly, 1989: 22; Amabile, 1997: 44-46; Mumford, 2000: 324; Mumford et al., 2002: 726;).

If innovative work behaviors are rewarded, it signals the organizational worth and will become the general and dominant way of behaving (Mumford, 2000: 324; Martins and Terblanche, 2003: 71). However, if there is a gap between what the top management says and what is actually rewarded, the exchange relationship possibly results in confusion and cynicism (O'Reilly, 1989: 23).

Employees generally direct their efforts toward behaviors or courses of actions when there is a high probability of being able to perform the behavior, of reaching some positive outcome and the outcome has value to the person (Kesselman, Hagen and Wherry, 1974: 569-570). Consistent with Porter and Lawler's theory, the relationship between performance and outcomes affects whether or not the individual is likely to repeat the behavior.

The perception of the existence of win-win solution referring to a situation beneficial to both employees and overall organization will create a suitable atmosphere and engender a propensity towards innovative work behavior.

However, there is a possibility that actual positive evaluations may adversely affect subsequent innovative performance because it increases the expectations of future evaluation (Woodman et al., 1993: 300) and innovative behaviors occur conditionally. The fourth hypotheses are as follows:

Hypothesis 4.a: Appropriate reward system positively affects IWBs of employees within a firm.

Hypothesis 4.b: The effects of appropriate reward system on IWBs of employees are moderated when they hold civic virtue within a firm.

2.3.1.5. Management's and Employees' Absorption capacity of the Risk:

Unlike previous studies in which absorption capacity has been defined as an individual's or an organization's ability to recognize the value of new information-external information, assimilate it and utilize it to productive ends (Woodman et al., 1993: 308; Ford, 1996: 1128-1129). In this study, it is used to define individual's and organization's ability to recognize the risky nature of innovative acts, assimilate some degree of risk in order to utilize novel and appropriate ideas to productive ends.

Risk represents the possibility of the unsuccessful outcome from intrapreneurial initiatives. Personal, social or psychological risks inherent in the process anticipating any deviations from the current practices (Lumpkin and Dess 1994: 144; Galbraith, 1999:10; Bamber and Owens, 2002: 216) because the creative problems are ill-defined, solutions and envisaged opportunities are uncertain.

Managers or innovative employees have propensity to make prudent mistakes in order to develop and perfect their ideas (Galbraith, 1999: 12). That's why; most creative efforts are associated with risk taking and labeled as risky ventures. For example, the generation of novel ideas is not assured, even if it is generated, there is no guarantee to gain acceptance from coworkers and finding supporters to develop that idea. Moreover, there is no certainty that the implementation of the proposed project could be succeeded and serve the current market needs even when the generation and promotion phases are passed successfully (Mumford et al., 2002: 709).

What the matter is the flexibility that is reasonable tolerance for ambiguity and failure showed by employees and management (Burgelman, 1983: 1362; Kuratko et al., 1990: 52; Hornsby et al., 1993: 31, 2002: 253-245, 260 Ahmed, 1998: 39). Managerial level flexibility is not sufficient if employees have no tolerance for failure.

An organization which values innovative initiatives, creates an atmosphere which looks like a forum where individuals feel free in exchange of their dumb ideas (Woodman et al., 1993: 306, 312; Ahmed 1998: 37; Martin and Terblanche, 2003:

72) by encouragement of calculated risk taking (Hornsby et al., 2002: 253-254) , handling conflicts constructively , legitimizing them, and stimulating participation. This orientation towards risk also requires freedom to try things and fail, acceptance of prudent mistakes, no harsh punishments for failures and giving a leeway to change embraced directions (Fry, 1987:9; Ahmed, 1998: 37; Amabile, 1997: 52; Kuratko et al., 2005: 703).

The way in which mistakes are handled in organizations possibly determines whether an employee feel free or not to behave in an innovative fashion. If mistakes are regarded as an important learning opportunity, employees will be easily encouraged to generate new ideas without being harmed and without the fear of losing their jobs or reputations within the firm (Stevenson and Jarillo, 1990: 24; Hornsby et al 2002: 258; Martins and Terblanche, 2003: 72). This also prevents risk-averse attitudes which is likely to destruct the atmosphere created by the other factors to increase the possibility of innovative undertakings (Alpkan et al., 2010: 9-10).

On the other hand, lowering standards for success and ignoring all mistakes or labeling fewer actions as failures without considering their total effect on organizational success in the market place is likely to threaten the future position of organization in the competitive environment. There is a need to find a comfortable balance between the frequency of failed actions and missed opportunities (Ford, 1996: 1129).

If the management shows its concern about challenging norms, active risk taking, sharing information, open communication and debate, employees are more likely to engage in innovative behaviors (McLean, 2005: 234), so another hypothesis related to the items creating a suitable atmosphere for novel initiatives is as follows:

Hypothesis 5.a: High level absorption capacity of the management and the employees positively affects their IWBs within a firm.

Hypothesis 5.b: The effects of high level absorption capacity of the management and the employees on their IWBs are moderated when they hold civic virtue within a firm.

Five interactional environmental factors (Kuratko et al., 1990: 55-57; Mumford et al., 2002: 732) that have been identified as management support, time availability, individual freedom and autonomy, reward availability/reinforcement and management's and employees' absorption capacity of risk represent the hypothetical model describing the climate constituents that are probably influencing employees' entrepreneurial activity within a company (Hornsby et al., 2002: 269).

In this study, main argument is that these climate variables are likely to influence people's perceptions of supportive environment for their possible move to initiate change, their willingness to continue creative efforts and the success of implementation efforts (Mumford et al., 2002: 732). This internal environment which is socially constructed by climate and culture may serve to dispel negative perceptions and providing comfort zone necessary to support distractions from legitimate practices, procedures and routines (Ford, 1996: 1123; Mumford et al., 2002: 732).

If an organization wants to manage an innovative outcome, it should also manage people successfully in order to attain that outcome (Mumford, 2000: 343) so the managerial level must allow people to understand the system- deeply held assumptions-, not just what they do, but how their work interacts with others inside and outside the company (Fry, 1987: 9). If they place the value on creativity and innovation in general, more specifically, if they have a sense of pride in organization's members and enthusiasm about what they are capable of doing, employees' motivation towards innovation will increase. At that time employees love what they do because of the environment that allows them to retain intrinsic motivational focus (Amabile, 1997: 52, 55).

In accordance with the proposed hypothetical model, the creation of the appropriate culture and the climate possibly lead to build enduring environment of human communities striving towards innovation (Ahmed, 1998: 43).

2.4. CONSEQUENCE OF IWBS: INNOVATIVE PERFORMANCE

As stated in the model (see Figure 2.1.), Innovative Performance is assumed to be the possible consequence of IWBS which also has positive correlations with the other aspects of performance like long-term profitability and growth because it enhances competitive advantage in turbulent environments by increasing the timely responsiveness and the level of reactive adaptability to the changing conditions and providing proactive evaluation of opportunities (Covin and Slevin, 1991: 9, 12, 19-20; Han, Kim and Srivasta, 1996: 19; Knight, 1997: 215; Neely and Hii, 1998: 34-35; Meeus and Oerlemans, 2000: 44; Gopalakrishnan, 2000: 146-149; Yılmaz, Alpkın and Bulut, 2009: 2477,2493).

The performance of a firm is a multifaceted construct that is examined in terms financial outcomes, market based outcomes and effectiveness indicators (Tuominen, Rajala and Möller, 2004: 497). Performance is also analyzed from the perspective of its contribution to innovativeness- which refers to an organization's capacity to innovate (Tuominen et al., 2004: 497) or the firm's ability to create novel and appropriate ideas and turn them into useful applications in the market place (Ergün et al., 2004: 260) and direct effects on manufacturing, new product and financial performance.

Innovative performance of firms is defined as the contribution of product/service and process innovations to a firms' economic performance (Ergün et al., 2004: 260). In the narrow sense, it refers to results for companies in terms of degree to which they actually introduce inventions into the market, i.e their rate of introduction of new products, new process systems or new devices. In that case new product announcements can be applied as an indicator of innovative performance. However, a broader understanding of innovative performance overarches the measurement of all stages from R&D inputs to patents and patent citations through to new product announcements (Hagedoorn and Cloudt, 2003: 1367-1370) despite the vague points in their capacity to measure it (Neely and Hii, 1998: 36-37; Arundel and Kabla, 1998: 138; Brouwer and Kleinknecht, 1999: 615-624; Hagedoorn and Cloudt, 2003: 136; Czarnitzki and Kraft 2004: 327).

Mostly used items in evaluating innovative performance include introduction of new products to the market ahead of competitors, percentage of new products within current product lines, level of emphasis on R&D, technological leadership and innovations, pioneering in developing breakthrough innovations in the industry, renewal of administrative structure and mentality in accordance with environmental conditions, spending on new product developments, the number of new product/service projects, the quality of newly developed products/services, innovations in terms of work processes and methods, the number of innovations protected under the intellectual property rights (patents, patent applications, registered designs and trademarks, utility model certificates) (Zahra ,1991, 1993, 1996; Knight, 1997; Neely and Hii, 1998; Antoncic and Hisrich, 2001; Hagedoorn and Cloudt, 2003).

All in all, measurement of innovative performance serves as a feedback on firms' standing in innovativeness and the gaps in desired and actual performance which trigger a systematic process of continuous improvement (Neely and Hii, 1998:40). The link between IWB and innovative performance and the other aspects of performance is hypothesized as follows:

Hypothesis 6: IWBs positively affect innovative performance.

Hypothesis 7: Innovative performance positively affects manufacturing performance.

Hypothesis 8: Innovative performance positively affects new product performance.

Hypothesis 9: Innovative performance positively affects financial performance.

3. METHODOLOGY

This study aims to generate a valid model based on the chain constructed between the intrapreneurial climate, IWB and performance. In so far, many models have been created to test the hypothesized relationship between intrapreneurial climate and several performance criteria but they have commonly neglected to investigate the mediating effects of IWB separately. In other words, studies in the literature have based their arguments on the effects of climatic factors but the behavioral effects on the possible relationships have been mostly out of focus. In this study, IWBs concept is analyzed separately from the extra-role behaviors and the findings of Janssen (Janssen, 2000; 2003; 2004) is the backbone of the developed model due to his focus on the IWB and its constituting parts directly. In the literature, many writings imply the IWBs indirectly categorizing them into the different behavioral dimensions. However, this study does not only examine these types of behaviors independently but also the interactive relationship between intrapreneurial climate and civic virtue and the possible effects of this type of organizational citizenship behaviors on the occurrence of IWB within the firm have been considered.

Reviewing the current literature on corporate entrepreneurship and extra-role behaviors the research model is developed which is illustrated in Figure 2.1 in the previous sections.

Survey method has been chosen to collect data with an aim of doing a field study exploring the current intrapreneurial climate within the firms located in Izmir and the effects of IWBs on several firm performances. It has been decided to get in contact with the firms operating in industrial zones in Izmir like Izmir Ataturk Organized Industrial Zone (IAOIZ), ITOB Industrial Zone which is newly developing industrial zone in Menderes, Kemalpaşa Industrial Zone and Aegean Free Zone that is the export processing zone. After face to face interview with the head of those zones on the operating firms, informational databases obtained from the web addresses have been created to decide upon the sample on which this study bases.

In the following parts questionnaire scale development, instruments, the process of questionnaire development and data collection and sample characteristics are explained in detail.

3.1. QUESTIONNAIRE DEVELOPMENT

3.1.1. Scaling

Both agreement and quality type of Likert scales have been used in this study. In agreement type, typical and mostly used format of “1.Strongly Disagree, 2. Disagree, 3. Neither Disagree nor Agree, 4. Agree, 5.Strongly Agree” is used to measure what degree the survey respondent agrees or disagrees with a statement in the questionnaire. Quality scales have also been used to determine the survey respondents’ standards concerning to the performance (Siegel, 2010). To measure the demographics of participants and questions related to the firm profile categorical data having nominal scales have been applied.

Scales used have been constructed after a deep literature review and have been adapted to the Turkish culture by using the method of translation and back translation as suggested in the literature (such as Ronen and Shenkar,1985). In developing instruments, *vocabulary equivalences* that is equivalence to the original language in which the instrument has been developed, *idiomatic equivalences* which could be a serious problem when some idioms unique to one language just can not be translated properly in other languages, *grammatical and syntactical equivalences* which is especially important when translating long passages, *experiential equivalences* or the equivalence of inferences and *conceptual equivalences* concerning the different meanings of certain concepts need to be considered (Sekaran,1983:62).

All the above types of equivalences can be ensured with good back translations which means the translation of the questionnaire into the native language, then translation back into the original language as a check (Ronen and Shenkar;1985:442) by persons who are not only competent with the different languages in question but are also familiar with the cultures involved, with the usage

of the concepts and their meanings in the relevant cultures and especially having a background information related to the field of the study (Sekaran, 1983:62).

In this study, at first all English to Turkish translations have been done by bilingual Turkish native. After controlling the original and the translated questions by group of people who are competent with both English and the field of study, questionnaire has been translated back into the source questionnaire language and the two questionnaire versions in the source language has been compared for difference or comparability. Back-translated text with minor adjustments has been 'like' the original source questionnaire, so translated text is considered to be the final version of the survey.

3.1.2. Instruments

Multidimensional factor structure is employed for intrapreneurial climate and firm performance while IWB and civic virtue have unidimensional factor solutions. Dimensions of intrapreneurial climate are management support, time availability, individual freedom and autonomy, reward availability/reinforcement, management's and employees' absorption capacity of risk. Corporate Entrepreneurship Assessment Instrument (CEAI) with five dimensions which contains 48 items (Hornsby et al., 2002: 264-265) is used with minor changes to measure climatic factors within the firms. Especially, the items on the different levels are reduced to the same level and simple terms so that the respondents easily grasp the meaning of the items and answer accordingly. Therefore, "our firm" is used instead of "my organization"; "we" is used to harmonize related parts and to facilitate true measurement of perception.

Factors named respectively as management support for corporate entrepreneurship is represented with 19 items, work discretion is represented with 10 items, rewards/reinforcement is represented with 6 items and time availability is represented with 6 items originally in CEAI.

Some questions in the CEAI have been modified so that they are perceived more directly and give the real meaning in Turkish culture. To this end, some of them have been divided into two parts, some of them have been put into the other category and some of them have been coded reversely contrarily to the original scale. Thus, 14 items from the management support, 10 items from the work discretion, 6 items from the rewards/reinforcement and additional one from the management support, 6 items from the time availability but two of them have been coded contrarily to the original ones and 4 items for newly created dimension of absorption capacity of risk by choosing items from the factor of management support have been used to define intrapreneurial climate. Beside, organizational boundaries labeled as the fifth factor has been replaced by this newly created dimension that is latent and seem to be excluded from the CEAI.

Nine item scale adopted from Janssen (2000) has been used to define Innovative Work Behavior covering the idea generation, idea promotion and idea realization without any partitioning.

Civic virtue has been chosen from the other organizational citizenship behaviors and has been included into the analyses. Four items are used that are adopted from the study of Podsakoff, Moorman, MacKenzie and Fetter (1990).

Innovative performance scale intends to evaluate the firms' innovative performance over the past three years in accordance with the success criteria. The scale consisting of 10 items is adopted from Bulut (2007) which is created from the studies of Zahra (1991, 1993, 1996), Knight (1997), Neely and Hii (1998), Antoncic and Hisrich (2001), Hagedoorn and Cloudt (2003). For financial and manufacturing performance criteria, the studies of Denison (2000) and Yılmaz, Alpkın and Ergün (2005) are utilized; new product performance scale is adapted from Lynn, Skov and Abel (1998) with respect to profit, investment, sales and market share expectations.

All in all; 90 items have been included in the survey, 6 of which are used for demographics, 3 of which are related to firm profiles, 43 of which are used to measure intrapreneurial climatic factors, 13 of which are used to evaluate behavioral aspects and lastly 25 of which are prepared to measure firm performance.

3.1.3. Questionnaire Design and Important Points in Designing

As every study paying attention to the reliability of the given answers reflecting the true perceptions, in this research many important points are taken into the consideration before going through the field study to get the highest response rate.

First of all, questionnaire has been designed to attract attention and create a desire to understand the mission of the items and create a positive attitude to answer them. To this end, booklet format consisting of three pages but one page in hand has been chosen to overcome the negative prejudices before answering.

Before going through the items, brief explanations about the content, intend of the study and the possible scientific contribution, the expected time to fill out all blank spaces have been explained. Also, respondents have been given a guarantee that their answers will not be used for another purpose and will not be disclosed, they are only used for scientific purposes. Contact information has also been added so that any comments or questions are communicated and participants can make a request about outcome notification.

Study questionnaire is made up of two main parts. In the first part items intend to measure demographics of participants such as age, gender, education, experience, position and department and to measure firm related issues like age of the firm, number of employees and industry to which it belongs. In the second part, the items are designed to test the relationship between intrapreneurial climate, IWB and firm performance with a moderator variable of civic virtue.

Although format of the items have not been designed to start from the easy to difficult ones respectively, the content of them are matter of importance so the concepts related to the following items are explained before. The meanings of the scales are also explained and the items designed as clear as possible (see Appendix C for Turkish version of the survey).

3.1.4. Data Collection and Sampling

The industrial zones located in Izmir have been scanned and out of eight industrial zones actively operating in Izmir; Izmir Ataturk Organized Industrial Zone (IAOIZ), ITOB Industrial Zone, Kemalpaşa Industrial Zone and Aegean Free Zone as an export processing zone have been selected as the sample of this study and the general managers and vice managers of these zones have been requested for an appointment to obtain detail information.

After getting into touch with them, required information about the zones and the procedures to conduct a field study have been obtained. Then from web sites of the industrial zones, 65 firms have been selected randomly and the general managers or the owners of the firms have been informed about the scope of the study via telephone and e-mails. Telephone has been used for giving brief information about the scope of the survey and the mail has been mostly used for sending a soft copy of the survey before conducting it.

After the authorities who can make a decision whether this type of research could be done or not within the firm have given an appointment, they have been visited one by one and they have been informed face to face in detail about the merits of the research. Respondents have been requested to self-administer the surveys and have been requested to return back within the same day. Due to the reason of work load, many of them have preferred to return the completed surveys later by themselves or as a group via mail, e-mail or hand delivery.

In this research exploring the effects of intrapreneurial climate with the civic virtue employees hold on the possible occurrence of IWBs and their consequent impact on firm performance, 65 manufacturing firms without any industrial limitations have been chosen for the field study as stated above. General Managers of the firms or the other people having authority to give a permission to conduct this study have been called for participation. But because of several reasons like time unavailability, inaccessible web addresses or contact information, ongoing construction activities especially within the newly developed industrial zones, some of them could not be informed about the survey, some of them have not returned

yet or refused to participate in this survey. From among the firms, 45 of them (69,23%) have returned and accepted to participate which are mostly from IASOB and ITOB. Then, according to the number of employees 450 forms have been sent to 45 manufacturing firms. The sample of this study consists of 45 firms and 450 employees including blue and white- collar workers, middle level managers, senior managers and owners or shareholders/partners.

Data were collected between 2010 December to 2011 March, and response rate in terms of participants is 44.2% and in terms of firms is 69,23%.

4. ANALYSIS AND FINDINGS

The analyses are based on the evaluations of 199 participants from 45 firms located in Izmir. In the data analysis process, SPSS 17.0 statistical package has been used. By the order of analyses, demographic characteristics of respondents and frequency tables indicating the participant rate in accordance with the number of employees and industries, principal component analysis, reliability and validity tests have been done. Secondly, mean scale scores, standard deviations for all measures and correlation analysis which tests the one-to-one relations between variables have been utilized. Then the multiple regression analyses testing the model constructed in this study has been applied. The findings of all these analyses are presented in the following parts.

4.1. SAMPLE CHARACTERISTICS

121 of 199 participants are male (60,9%). 78,2% of the participants have bachelor's degree where 16,2% of them graduated from high school and 5,6% of them have post-graduate degrees. While looking at the positions of participants, distribution is as follows: 50,3% of them are white-collar workers , 14,9% of them are blue-collars, 6,7% of them consists of senior managers, ,5% of them are owners or shareholders/partners.

4.2. PRINCIPAL COMPONENT ANALYSIS (PCA)

For the measure purification of scales used in this study, Principal Component Analysis has been used. By using the SPSS 17.0 statistical package as the software of choice, the procedure of principal component factoring that is utilized when the objective is to summarize most of the variance in a minimum number of factors for prediction purposes (Hair, Black, Babin, Anderson and Tatham, 2005:117), has been used to factor analyze the data. Thereby, the major part of total variance is explained by fewer principal components (Hair et al.; 2005:117; Albayrak; 2006:133). Factors with eigenvalues-represents the amount of variance accounted for by a factor- (Hair et al., 2005: 102) "1.00" and greater have been taken into the consideration during the data reduction procedure. In order to interpret the

factors adequately and redistribute the variance from earlier factors to later ones and to achieve a simpler, theoretically more meaningful factor pattern (Hair et al., 2005:123), Kaiser's Varimax Rotation has been conducted for factor analysis procedure.

In the following paragraphs, intrapreneurial climate components are analyzed with that of IWB and civic virtue. On the other hand, firm performance scales have been constructed as possible as by choosing mostly used scales in the literature and included in the questionnaire. The factor solution of the innovative firm performance is analyzed separately with the other constituents of new product, manufacturing and financial performance.

Both the scales of innovative work behaviors and civic virtue have been included into the principal component analysis with that of intrapreneurial climate. The principal component analysis indicating the findings pertaining to the intrapreneurial climate, IWB and civic virtue is depicted as the following Table 4.1.

From the scale of management support, the questions of both "Our firm is quick to use improved work methods" and "Our firm is quick to use improved work methods that are developed by employees" are extracted respectively from the factor structure because of their pernicious nature. Also the other question; "Our firm has mostly promoted employees generating innovative ideas" which has been firstly incorporated into the scale of management support but tends to explain reward availability/reinforcement within the firm.

Another excluded question from the scale of civic virtue is "We attend meetings that are not mandatory, but are considered important". Other than these, the remaining questions are loaded on the related factors as expected before. As a result of principal component analysis with varimax rotation; seven factor solutions has occurred which is made up of management support, individual freedom and autonomy, reward availability/reinforcements, management' and employees' absorption capacity of risk, time availability, innovative work behaviors and civic virtue.

Table 4.1. Factors Related to Intrapreneurial Climate, IWB and Civic Virtue

QUESTIONS	FACTORS						
	1	2	3	4	5	6	7
1- MANAGEMENT SUPPORT							
Our firm usually encourages us to actualize our innovative ideas.	,738						
Our firm is always very receptive to our new ideas.	,736						
Our firm provides several opportunities to realize innovative ideas.	,715						
In our firm, developing one's own ideas is encouraged for the improvement of the firm.	,703						
Our firm is aware of the new ideas of employees.	,695						
Our firm usually provides financial support to get successful innovative projects off the ground.	,661						
In our firm, employees are not put back by bureaucratic procedures while carrying out their innovative projects.	,656						
Our firm even bends rules to keep promising ideas on track.	,622						
In our firm; the exchange of ideas among departments is encouraged to develop new ideas and projects.	,598						
Our firm gives a free time to idea owners in order to develop innovative ideas that are believed to be successful.	,583						
Our firm has many top managers who have been known for their experience with the innovation process.	,560						
In our firm; departmental or functional boundaries are removed with regard to carry out innovative projects.	,554						
2-INNOVATIVE WORK BEHAVIORS							
	1	2	3	4	5	6	7
In our firm, we make the others enthusiastic for the continuity of innovative ideas.		,764					
In our firm, we introduce our innovative ideas into our work environment in a systematic way.		,709					
In our firm, we take action to realize new ideas that we have generated.		,689					
We contribute to our firm with innovative ideas in a commercial and/or social sense.		,675					
In our firm, we share original solutions created for problems we encounter to the others.		,672					
In our firm, we seek for support for the realization of our innovative ideas.		,660					
In our firm, we evaluate/control the social and economic results of our innovative ideas.		,574					
In our firm, in the face of difficult situations, we offer new ideas.		,530					
3-INDIVIDUAL FREEDOM AND AUTONOMY							
	1	2	3	4	5	6	7
I am left on my own how to do my own work.			,788				
It is basically my own responsibility to decide how my job gets done.			,752				
I feel that I am my own boss.			,625				
I am encouraged to use my methods of doing and to be creative to get my jobs done.			,612				
Our firm provides the chance to do something that makes use of my abilities.			,589				
I almost always get to decide what I do on my job.			,578				
Our firm, provides freedom to use my own judgment.			,569				
I am not exposed to harsh criticism result from the mistakes I make on the job.			,488				

4-MANAGEMENT'S AND EMPLOYEES ABSORPTION CAPACITY OF RISK	1	2	3	4	5	6	7
In our firm, employees are often encouraged to take calculated risks.							,796
The term "risk taker" is considered a positive attribute for employees of our firm.							,772
In our firm, individual risk takers are often recognized for their willingness to champion new projects, whether eventually successful or not.							,738
In our firm, losses resulted from bona fide mistakes are tolerated.							,539
In our firm, both large and small projects that some will undoubtedly fail are supported.							,479
5-REWARD AVAILABILITY /REINFORCEMENT	1	2	3	4	5	6	7
In our firm, our supervisors will give us special recognition if our work performance is especially good.							,681
In our firm, outstanding work performance is communicated with upper management.							,617
In our firm, the rewards we receive are dependent upon our work performance on the job.							,601
In our firm, employees with successful innovative projects are offered additional options beyond the standard reward system.							,574
Our firm has mostly promoted employees generating innovative ideas.							,547
In our firm, we know that if we perform well in the job; our job responsibilities will increase.							,510
6-TIME AVAILABILITY	1	2	3	4	5	6	7
I have enough time to think about our firm's problems/related to our firm.							,800
I have enough time to get everything done.							,765
During the past three months, I had enough time to develop new ideas related to my job.							,668
My co-workers and I spend time on solving our firm's problems.							,379
7-CIVIC VIRTUE	1	2	3	4	5	6	7
We keep abreast of changes in our firm.							,804
We keep up with firm related announcements and news.							,757
We try to be useful by attending functions that contribute positively to our firm's image.							,749
TOTAL EXPLAINED VARIANCE: 63,653%							

The scale of the firm performance has been constructed based upon the five factors: Innovative, new product, manufacturing, and financial performance. During the test of the variables by the principal component analysis; items encompassing the manufacturing, marketing, financial and new product performance are loaded on somewhat different factors as expected before except the innovative performance. The items related to the total sales and market share as a part of marketing

performance tend to explain the second factor. Cost of manufacturing loaded on the same factor with the new product performance so it is dropped from the scale of manufacturing performance.

Apart from these, customer satisfaction loaded on the fourth factor. Henceforth, expected five factors are reduced to the four factors including innovative, new product, manufacturing and financial performance.

Table 4.2. Factors Related to Firm Performance

	QUESTIONS	FACTORS			
		1	2	3	4
DIMENSIONS OF PERFORMANCE	1- INNOVATIVE PERFORMANCE				
	The number of new lines of products or services	,799			
	Company's spending on new product development activities	,762			
	Having pioneering role in the development of breakthrough innovations in the industry	,754			
	An emphasis on R&D, technological leadership and innovations.	,747			
	Developing innovations in terms of job processes and methods	,733			
	The percentage of new products within the product range	,724			
	Renewal of administer structure and mentality in accordance with environmental conditions	,681			
	The number of innovations protected by intellectual property rights (patent counts, patent applications, patent citations, utility model certificates)	,624			
	Capability of introducing new products to the market ahead of competitors	,607			
The quality of newly developed products and services	,547				
	2- FINANCIAL PERFORMANCE	1	2	3	4
Return on assets (Profit /Total Assets)		,889			
Turnover Profitability (Profit /Total Sales)		,844			
Profitability		,841			
Free cash flow		,819			
Total sales		,633			
Market share		,595			
	3- NEW PRODUCT PERFORMANCE	1	2	3	4
Profit expectations of newly introduced products				,821	
Return on investment expectations of newly introduced products				,731	
Sales expectations of newly introduced products				,684	
Market share expectations of newly introduced products				,663	
Cost of manufacturing				,561	

4-MANUFACTURING PERFORMANCE	1	2	3	4
Speed of manufacturing and delivery				,777
Customer satisfaction				,743
Quality of manufacturing				,705
Manufacturing flexibility				,545
TOTAL VARIANCE EXPLAINED: 67,638%				

4.3. RELIABILITY AND VALIDITY ANALYSES

Upon the findings of principal component analysis that has been applied to the variables of factors of intrapreneurial climate, IWB and firm performance; variables concerning every factor has loaded highly on a single factor (see Table 4.1 and Table 4.2) which is the indicator of factor *unidimensionality*.

Once a scale is deemed unidimensional, its reliability score is measured by several diagnostic analyses. Reliability is an assessment of the degree of consistency between multiple measurements of a variable (Hair et al., 2005:137). Reliability tells us whether or not a particular variable does a good job of measuring the true underlying factor or construct that it purports to measure. The greater the reliability, the less error variance there is in the measure and the closer the correspondence between the measure and the true construct (Lattin et al., 2003:183).

In this study, Cronbach's alpha that is the most widely used coefficient of equivalence (Streiner, 2003:99; Gerbig and Anderson, 1988:190) has been used to assess the consistency of the entire scale (Hair et al., 2005: 137,139). The alpha formula is one of several internal consistency analyses that may be used to gauge the reliability (Cronbach and Shavelson, 2004:2). Beside the test of scale reliability, in order to analyze the consistency of given answers of the respondents from same firms, *intra class correlation* (ICC) procedure have been applied.

The generally agreed upon lower limit for Cronbach's alpha is .70 (Hair et al., 2005:137) denoting the internal consistency of a scale although higher values of alpha considered to be a prerequisite for internal consistency are disputable in the

literature. Since, it is believed that higher values may reflect unnecessary duplication so the argument of bigger is always better is refuted to a certain extent by newly developed scales (Streiner, 2003:102).

Alpha coefficients and intra-class correlation findings are calculated by SPSS 17.0 statistical package program and the results are depicted in the following Table 4.3.

All factors' alpha coefficients are higher than 0,70 -lie within the limits (α : ,74, α : ,92)- , denoting that all these factors' internal consistencies are desirable. Intra-class correlation value higher than 0,50 indicates consistency among group of participants. Although some of the ICC values does not seem to be highly satisfactory like individual freedom and autonomy (ICC: ,49), time availability (ICC: ,42) and manufacturing performance (ICC: ,49), the values of the other factors satisfy the threshold value.

Table 4.3: Reliability Test Results

Variables	Number of Items	Alpha Coefficients (α)	ICC Values
Management Support	12	,92	,50
Innovative Work Behaviors	8	,90	,54
Individual Freedom and Autonomy	8	,88	,49
Management and Employees' Absorption Capacity of Risk	5	,84	,52
Reward Availability/Reinforcement	6	,88	,55
Time Availability	4	,74	,42
Civic Virtue	3	,82	,61
Innovative Performance	10	,92	,55
Financial Performance	6	,92	,68
New Product Performance	5	,86	,56
Manufacturing Performance	4	,79	,49

Nonetheless, as is understood from the Table 4.4, variance of every factor which is greater than squared correlation of each factor shows the *discriminant validity* which is the degree to which two conceptually similar concepts are belong to mutually exclusive categories so are distinct from each other (Hair et al., 2005:137; Zikmund, 2009:579).

4.4. DESCRIPTIVE STATISTICS AND CORRELATION ANALYSES

After reliability and validity tests, means of the variables loaded on a single factor have been calculated. Descriptive statistics including correlation coefficients, mean scale scores and standard deviations are depicted in the Table 4.4.

Correlation coefficients are significant both at the 0.01 level and at the 0.05 level which shows that all factors are different from but significantly correlated to each other also signals the existence of discriminant validity. As an exception, the relation between individual freedom and autonomy and financial performance is not significant neither at the 0.01 level nor 0.05 levels.

Strongest relation between the intrapreneurial climatic factors and IWBs are between the subdimension of intrapreneurial climate: reward availability/reinforcement and IWB ($r = .695$; $p < .01$) while weakest correlation is between time availability and financial performance ($r = .179$; $p < .05$). There is also relatively weak relation between IWBs and financial performance ($r = .271$; $p < .01$), IWBs and manufacturing performance ($r = .383$; $p < .01$) and IWBs and new product performance ($r = .304$; $p < .01$) in contrast to strong correlation between these types of behaviors and innovative performance ($r = .510$; $p < .01$).

The strongest relation between the performance criteria is between the financial and new product performance ($r = .620$; $p < .01$), relatively weakest correlation has occurred between the financial and manufacturing performance ($r = .478$; $p < .01$).

Ultimate research model exploring the possible effects of intrapreneurial climate together with innovative work behaviors on firm performance is illustrated in Figure 4.1. Subsequent sections give details about the proposed relations that are subject to multivariate regression analyses.

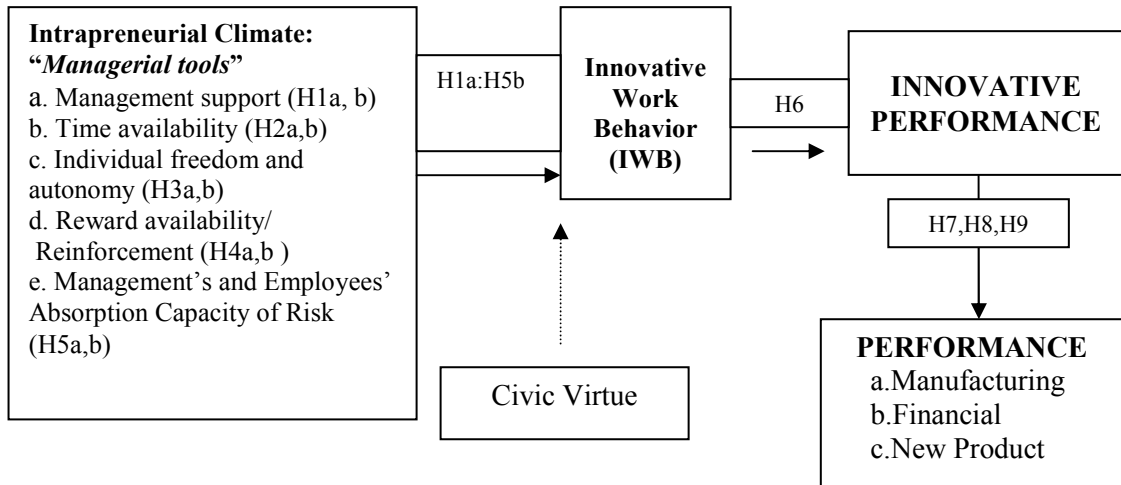


Figure 4.1. Ultimate Research Model

Table 4.4. Correlation Coefficients, Mean Scale Scores and Standard Deviations of Variables

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11
1- Management Support	3,61	,68	1										
2- Innovative Work Behaviors	3,80	,60	,651**	1									
3- Individual Freedom and Autonomy	3,72	,71	,552**	,570**	1								
4- Management's and Employees' Absorption Capacity of Risk	3,23	,72	,574**	,553**	,604**	1							
5- Reward Availability/Reinforcement	3,45	,85	,657**	,695**	,682**	,603**	1						
6- Time Availability	3,46	,72	,431**	,441**	,516**	,409**	,532**	1					
7 -Civic Virtue	4,10	,66	,488**	,467**	,415**	,414**	,411**	,330**	1				
8- Innovative Performance	3,57	,71	,552**	,510**	,455**	,468**	,549**	,323**	,363**	1			
9- Financial Performance	3,49	,70	,376**	,271**	,136	,256**	,385**	,179*	,270**	,566**	1		
10- New Product Performance	3,54	,64	,391**	,304**	,181*	,307**	,384**	,207**	,265**	,597**	,620**	1	
11- Manufacturing Performance	3,81	,65	,563**	,383**	,325**	,306**	,414**	,296**	,340**	,587**	,478**	,586**	1

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

4.5. HYPOTHESIS TESTING

Multiple regression analysis is a statistical technique that can be used to analyze the statistical relationship between a single dependent (criterion) variable and a set of independent (predictor) variables therefore attempts to explain or predict the dependent variable on the basis of two or more independent variables. On the other hand, with simple regression analyses, the direction and the power of the relation among two variables are tested (Zikmund, 2006:575).

In this study, in the direction of the factor and measurement analyses, multiple regression analyses has been used to test proposed effects of intrapreneurial climate together with civic virtue on firm performance. All proposed models depicted in this section have been analyzed by using SPSS 17.0 statistical package program.

There is a need to test the hypothesis that our regression model can represent the population rather than just our one sample. *F* ratio included in the tables represent whether the overall model is statistically significant or not ($p < .01$ or $p < .05$). When the ratio is statistically significant (i.e., different from zero or the ratio of the explained variance to the unexplained variance is different from zero), the model is not specific to just this sample so it would be expected to be significant in multiple samples from this population (Hair et al., 2005:215). R^2 (Coefficient of determination) indicates the percentage of variation in dependent variable by the variation in the independent variable. This value shows the exploratory power of the model. The strength of the relationship is represented by the values that R^2 holds ($R^2=0$ or $R^2=1$), if there is no linear relationship between the independent and dependent variable, R^2 would equal to 0, otherwise the regression model perfectly predicts the dependent variable (Albayrak, 2006:257).

Collinearity is generally agreed to be present if there is an approximate linear relationship among some of the predictor variables in the data (Mason and Perrault, 1991:269). Multicollinearity occurs due to the combined effect of two or more other independent variables. In simple terms, if there is multicollinearity, each

independent variable becomes a dependent variable. In order to detect the multicollinearity, correlation matrix of the predictor variables, the coefficients of determination of each independent variables regressed on the remaining predictor variables (tolerance value) and measures based on the eigenstructure of the data matrix including variance inflation factors (VIF) are used (Mason and Perrault, 1991:270; Hair et al., 2005: 227-230). As a rule of thumb, if tolerance value is less than 0, 20, presumably there is problem of multicollinearity. However the variance of inflation factor (VIF) as another instrument used to detect the multicollinearity is calculated as the inverse of the tolerance value and VIF values above 5 are helpful to diagnose multicollinearity problem (Garson, 2010). Multicollinearity negatively affects to interpret the model due to the affected calculations regarding regression coefficients.

4.5.1. Regression Analysis I: The effects of Climatic Factors on IWBs

The findings of the multiple regression analysis explaining the effects of climatic factors on IWBs are given in Table 4.5.

Table 4.5. The impacts of Intrapreneurial Climate on IWBs

Independent Variables	Standardized Coefficients (Beta)	t	p	Collinearity Statistics	
				Tolerance	VIF
Management's Support	,289**	4,336	,000	,516	1,938
Individual Freedom and Autonomy	,076	1,068	,287	,450	2,221
Management and Employees' Absorption Capacity of Risk	,102	1,552	,122	,530	1,888
Reward availability/reinforcement	,369**	4,821	,000	,391	2,557
Time Availability	,039	,671	,503	,668	1,498
$R^2 = ,560$ $F=48,800$ $p=,000$					
**p<,01					

The model constructed upon the proposed effects of five factors on IWBs is significant ($F=48,800$, $p=, 000$). R^2 is calculated as ,560 which means that, all independent variables included in this model explain the 56% of the change/variance in the dependent variable.

As a result of this, management support ($\beta: ,289$; $p<0,01$) and reward availability/reinforcement ($\beta: ,369$; $p<0,01$) have positive effects on IWBs , whereas individual freedom and autonomy (p value is ,287), management’s and employees’ absorption capacity of risk (p value is ,122) and time availability (p value is ,503) are not significantly related to IWBs even if the correlation matrix shows supported relations between these variables and IWBs. In addition to this, the values of tolerance and VIF are within the acceptable range signals the absence of multicollinearity. The findings of hypothesis testing based on the multiple regression analysis are presented with the Figure 4.2 to visualizing the accepted and rejected hypotheses.

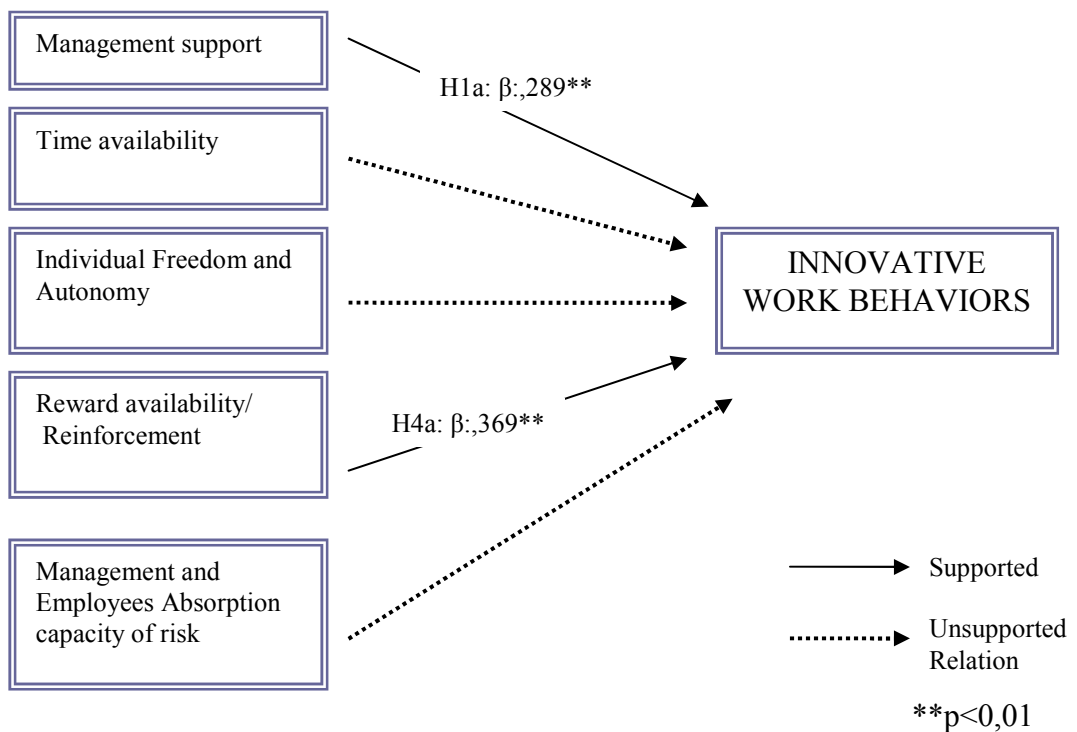


Figure 4.2. Sub Model-I

4.5.2. Regression Analysis II: The Interaction Effects of both Intrapreneurial Climate and Civic Virtue on IWBs

The findings of regression analysis exploring the effects of external factors coupled with internal ones deriving from employees themselves on IWBs are illustrated in Table 4.6 with the summarizing Figure 4.4.

Table 4.6. The Interaction Effects of both Intrapreneurial Climate and Civic Virtue on IWBs

Independent Variables	Standardized Coefficients (Beta)	t	p
Civic Virtue x Management Support	,232*	2,289	,023
Civic Virtue x Time Availability	-,071	-,810	,419
Civic Virtue x Individual Freedom and Autonomy	,001	,005	,996
Civic Virtue x Reward Availability /Reinforcement	,520**	4,711	,000
Civic Virtue x Management and Employees' Absorption Capacity of Risk	,068	,709	,479
$R^2 = ,527$ $F=42,832$ $p=,000$			
** $p<0,01$			
* $p<0,05$			

The regression model based upon the impacts of climatic factors as a predictor and the impacts of civic virtue that is the one form of extra-role behaviors as a moderator is considerably significant ($F=42,832$ $p=,000$). According to the moderator model of Baron and Kenny (1986: 1174), the moderator hypothesis is supported if the interaction between “Predictor x Moderator” and “Outcome Variable” is significant as depicted in Figure 4.3 so the model satisfy this condition.

In this model, R^2 is calculated as ,527 therefore all independent variables included in this model explain the 52,7% of the change/variance in the dependent variable.

As a result, management support ($\beta: .232$; $p < 0,05$) and reward availability/reinforcement ($\beta: .520$; $p < 0,01$) with multiplier civic virtue have been found to have positive and significant effects on IWBs within a firm.

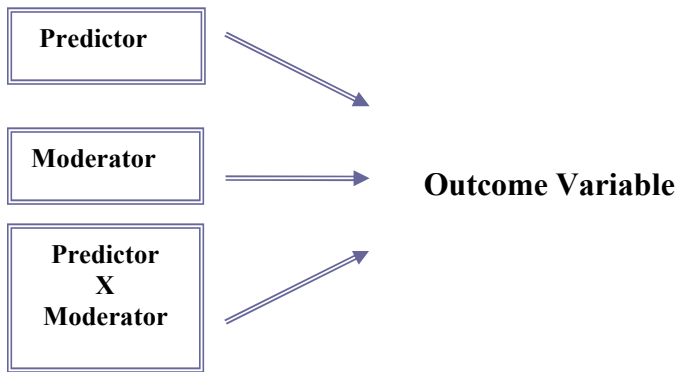


Figure 4.3. Moderator Model: Three paths (Baron and Kenny, 1986: 1174)

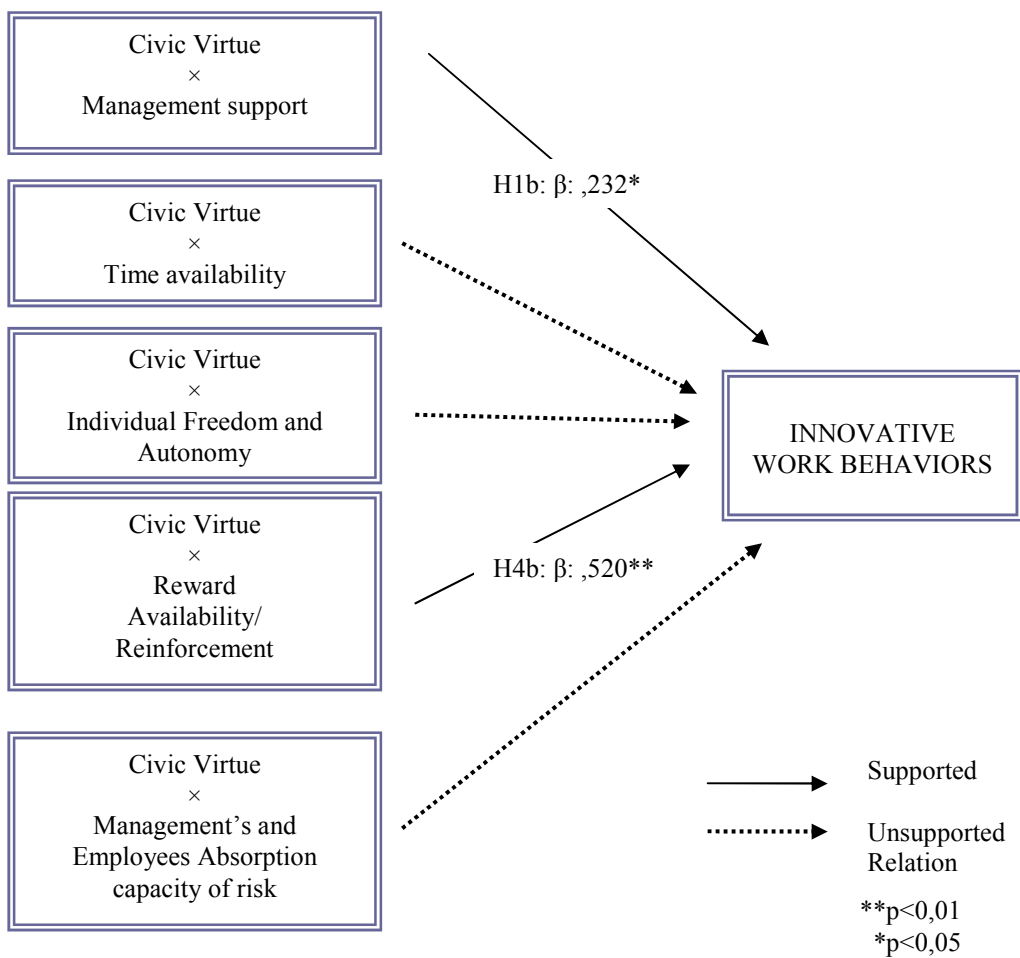


Figure 4.4. Sub-model -II

4.5.3 Regression Analysis III: The impacts of IWBs on Innovative Performance of the Firm

The results about the effects IWBs on innovative performance attained from the regression analysis are presented in Table 4.7 and the Sub model-III giving the supported hypothesis is diagrammed in Figure 4.5.

Table 4.7. The impact of IWBs on Innovative Performance of the Firm

Independent Variables (Interaction Variables)	Standardized Coefficients (Beta)	t	p
Civic Virtue x Management Support	,159	1,325	,187
Civic Virtue x Time Availability	-,105	-1,021	,308
Civic Virtue x Individual Freedom and Autonomy	-,005	-,039	,969
Civic Virtue x Reward availability/Reinforcement	,328*	2,392	,018
Civic Virtue x Management and Employees' Absorption Capacity of Risk	,099	,881	,379
Innovative Work Behaviors	,170*	2,001	,047
$R^2 = ,363$ $F=17,924$ $p=,000$			
$*p<,05$			

Both the effects of interaction between Intrapreneurial Climate and Civic Virtue and IWBs on firm's innovative performance are analyzed with the multiple regression model that is significant ($F=17,924$; $p=,000$) . R^2 equals to ,363 which means that all independent variables in the model explain the 36,3% of the change in the innovative performance of the firm.

The findings indicate that IWBs ($\beta: ,170$; $p<,05$) have positive and significant effects on firms' innovative performance as hypothesized in the model. The interaction between reward availability and civic virtue has also a positive impact on firm performance ($\beta: ,328$; $p<,05$). But the impact could not overshadow the effect of IWBs within a firm. As to values seen in the Table 4.7, the other factors could not impede the relation between the IWB and innovative performance.

However, the values of correlation matrix (see Table 4.4) show that all of the other factors including management support ($r=.552$; $p<0,01$), individual freedom and autonomy ($r=.455$; $p<0,01$), management and employees' absorption capacity of risk ($r=.468$; $p<0,01$), time availability ($r=.323$; $p<0,01$) and civic virtue ($r=.363$; $p<0,01$) have positive and significant one to one relationships with innovative performance.

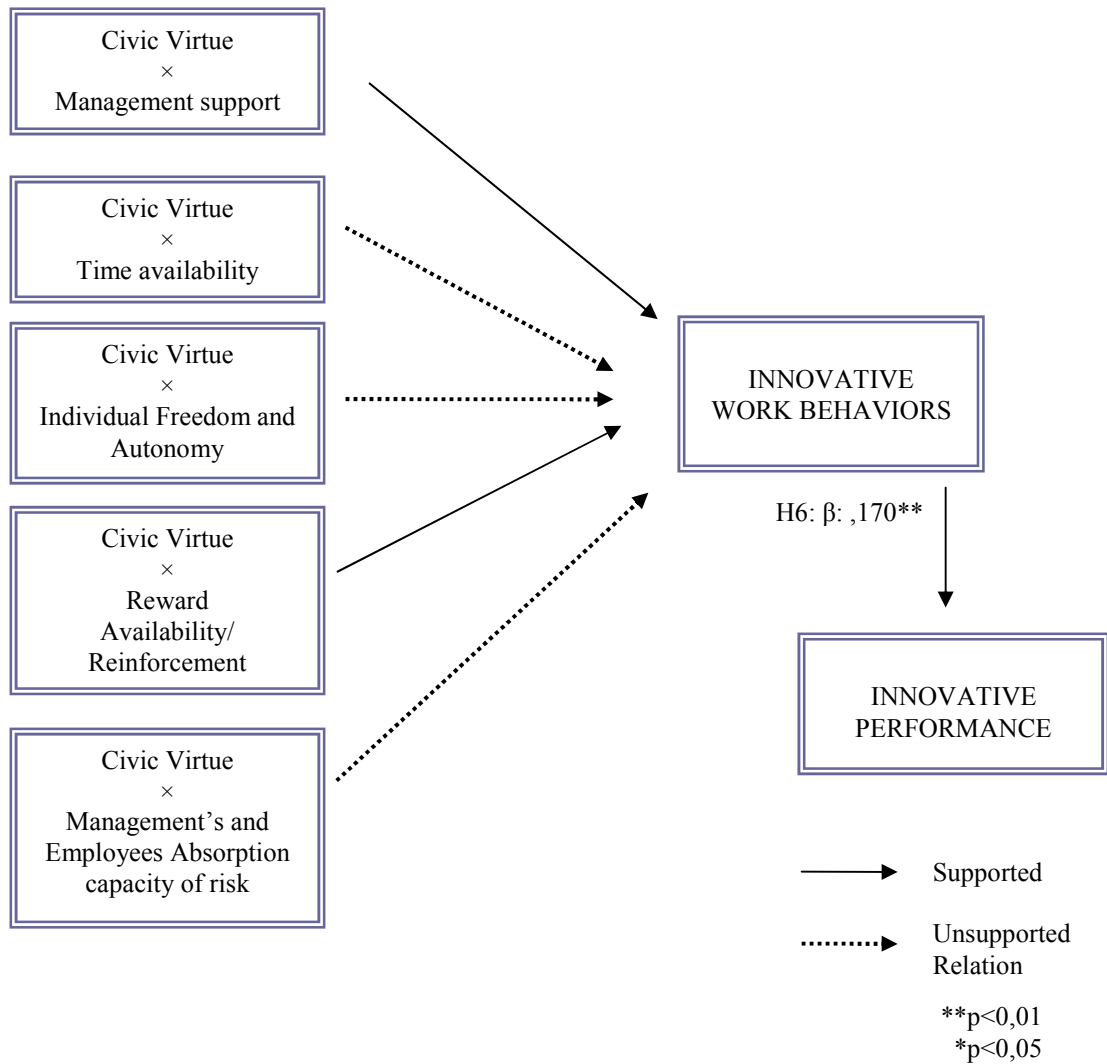


Figure 4.5. Sub model-III

4.5.4. Regression IV: The impacts of Innovative Performance on the Firm's Financial Performance

The findings of regression analysis exploring the effects of innovative performance on firm's financial performance is illustrated in Table 4.8 and both supported and unsupported hypotheses are diagrammed in Figure 4.6 with the sub model-IV.

Table 4.8. The impacts of Innovative Performance on the Firm's Financial Performance

Independent Variables	Standardized Coefficients (Beta)	t	p
Civic Virtue x Management Support	,221	1,864	,064
Civic Virtue x Time Availability	,026	,258	,797
Civic Virtue x Individual Freedom and Autonomy	-,499**	-3,832	,000
Civic Virtue x Reward availability/ Reinforcement	,410*	2,998	,003
Civic Virtue x Management's and Employees' Absorption Capacity of Risk	,049	,442	,659
Innovative Work Behaviors	-,161	-1,899	,059
Innovative Performance	,511**	7,157	,000
$R^2 = ,393$ $F=17,218$ $p=,000$			
			** $p < 0,01$
			* $p < 0,05$

The model exploring the significant impacts of innovative performance on financial performance by including other factors in the equation is significant ($F=17,218$ $p=,000$). R^2 is calculated as ,393 which means that all the independent variables in the model explain the 39,3% variance /change in the financial performance of the firm.

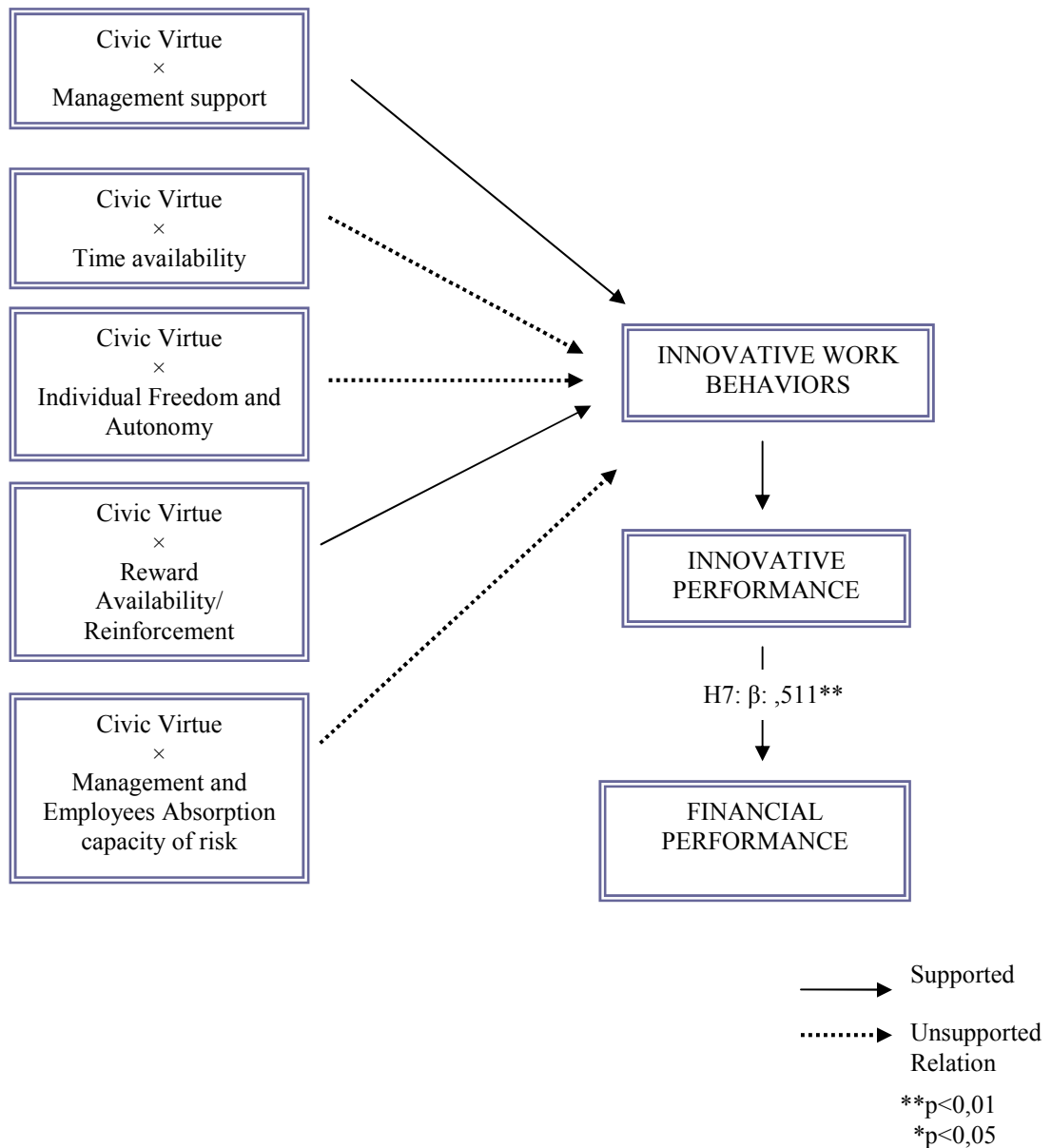


Figure 4.6. Sub-model IV

The results listed in the Table 4.8 verify the positive and significant relationship between innovative performance and financial performance ($\beta: ,511$; $p<0,01$).

The interaction of civic virtue and individual freedom and autonomy has significant but negative relationship with financial performance ($\beta: -,499$; $p<0,01$) even if in the correlation analysis, the relation between individual freedom and autonomy and financial performance is found insignificant. Also reward availability together with civic virtue has also significant relation with financial performance

(β : ,410; $p < 0,05$). In correlation matrix, the results show that innovative performance has strong one to one relation with financial performance (r : ,566; $p < 0,01$). In addition to these, management support (r : ,376; $p < 0,01$), management and employees' absorption capacity of risk (r : ,256; $p < 0,01$), time availability (r : ,179; $p < 0,05$), IWBs (r : ,271; $p < 0,01$) and civic virtue (r : ,270; $p < 0,01$) seem to have significant relations with financial performance according to the findings of correlation matrix that are somewhat different from that of regression analysis.

4.5.5 Regression V: The impacts of Innovative Performance on the Firm's New Product Performance

The results of regression analysis exploring the effects of innovative performance on firm's new product performance is illustrated in Table 4.9 and both supported and unsupported hypotheses are diagrammed in Figure 4.7 with the sub model-V.

Table 4.9. The impacts of Innovative Performance on the Firm's New Product Performance

Independent Variables	Standardized Coefficients (Beta)	t	p
Civic Virtue x Management Support	,218	1,856	,065
Civic Virtue x Time Availability	,032	,325	,745
Civic Virtue x Individual Freedom and Autonomy	-,432**	-3,353	,001
Civic Virtue x Reward availability/ Reinforcement	,241	1,783	,076
Civic Virtue x Management and Employees' Absorption Capacity of Risk	,085	,786	,433
Innovative Work Behaviors	-,087	-1,040	,300
Innovative Performance	,550**	7,778	,000
$R^2 = ,406$ $F = 18,161$ $p = ,000$			
**$p < 0,01$			

The model exploring the significant impacts of innovative performance on new product performance including the other variables in the equation is significant ($F=18,161$ $p=,000$). R^2 is calculated as ,406 which means that the independent variables in the model explain the 40,6% variance /change in the new product performance.

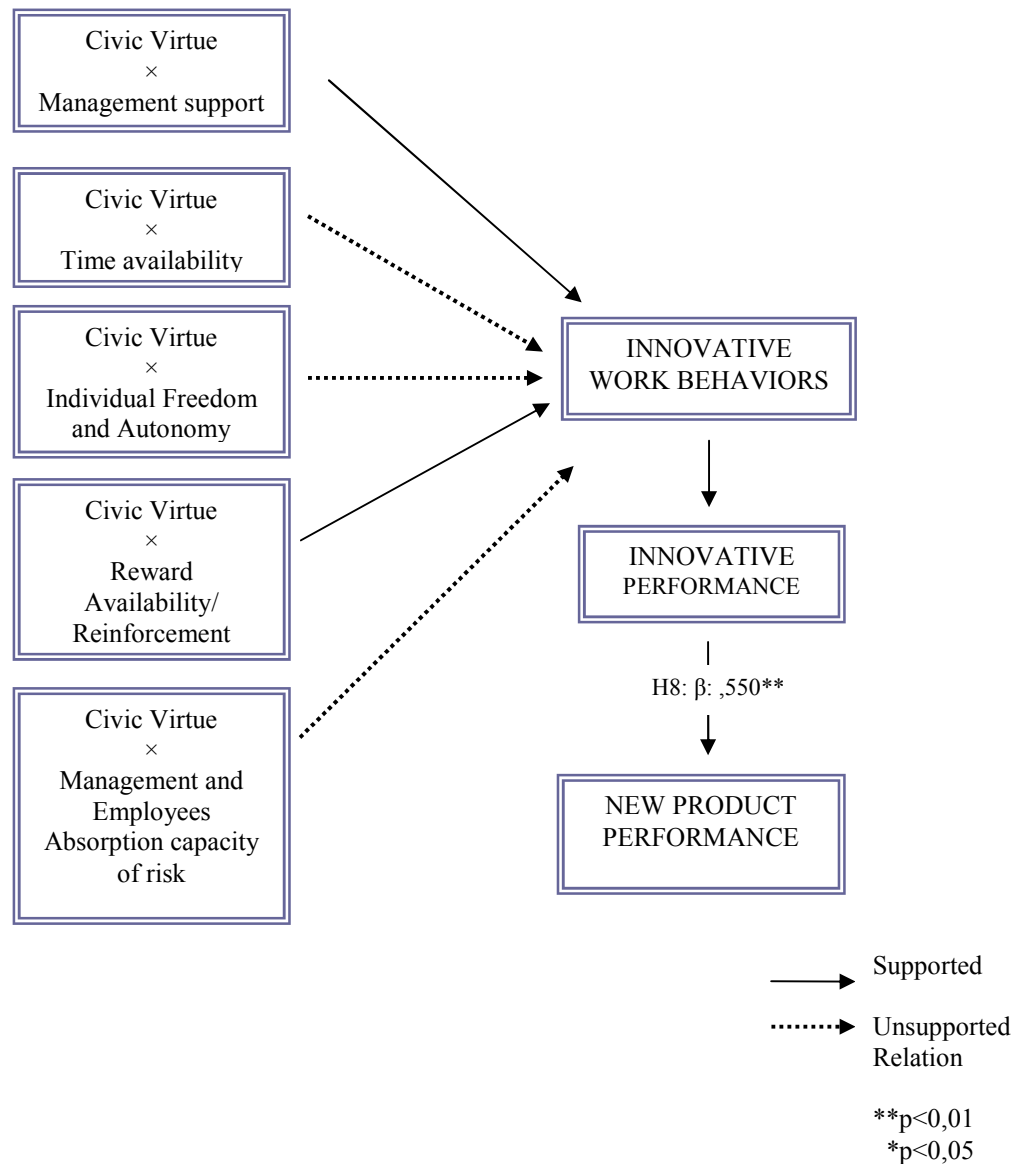


Figure 4.7: Sub-model V

The results shows that innovative performance has positive and significant relationship with new product performance (β : ,550**; $p < 0,01$) as presupposed. The interaction of civic virtue and individual freedom and autonomy has significant but negative relationship with new product performance (β : -,432; $p < 0,01$) even if in the

correlation analysis, the weak but positive correlation between individual freedom and autonomy and new product performance is found ($r=.181; p<0,01$).

On the other hand , the interdependence analysis results in contrast to the that of regression ones support the one-to-one significant relationships of management support ($r=.391; p<0,01$), management and employees' absorption capacity of risk ($r=.307; p<0,01$), reward availability/reinforcement ($r=.384; p<0,01$), time availability ($r=.207; p<0,01$) , IWBs ($r=.304; p<0,01$), civic virtue ($r=.265; p<0,01$) with new product performance. Thus when the other variables are added/included into the model, these significant correlations disappear.

4.5.6. Regression VI: The impacts of Innovative Performance on the Firm's Manufacturing Performance

The results of regression analysis exploring the effects of innovative performance on firm's manufacturing performance is illustrated in Table 4.10 and both supported and unsupported hypotheses are diagrammed in Figure 4.8 with the sub model-VI.

Table 4.10. The impacts of Innovative Performance on the Firm's Manufacturing Performance

Independent Variables	Standardized Coefficients (Beta)	t	p
Civic Virtue x Management Support	,525**	4,597	,000
Civic Virtue x Time Availability	,066	,686	,493
Civic Virtue x Individual Freedom and Autonomy	-,154	-1,225	,222
Civic Virtue x Reward availability/ Reinforcement	-,005	-,035	,972
Civic Virtue x Management and Employees' Absorption Capacity of Risk	-,164	-1,549	,123
Innovative Work Behaviors	-,035	-,429	,668
Innovative Performance	,458**	6,662	,000
$R^2 = ,437 \quad F=20,657 \quad p=,000$			
**$p<0,01$			

As seen from the table 4.10 above, the regression model based upon the supposed effects of innovative performance on firm's manufacturing performance together with included variables in the equation is significant ($F=20,657$ $p=,000$). R^2 is calculated as ,437 which means that the independent variables in the model explain the 43,7% variance /change in the manufacturing performance.

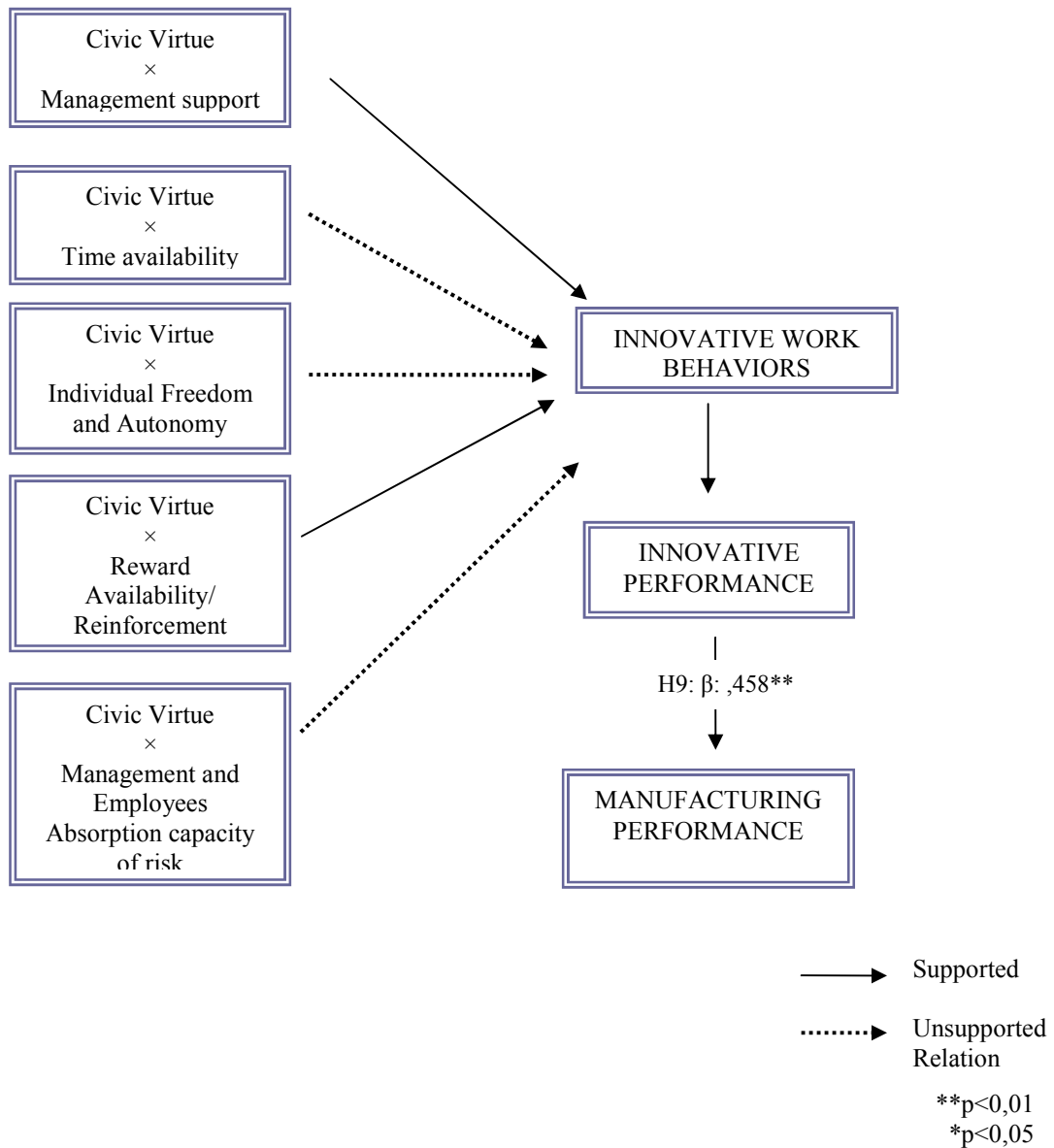


Figure 4.8: Sub-model VI

The values denote that innovative performance has significant impacts on firm's manufacturing performance even the other variables included in the model ($\beta: ,458$; $p<0,01$). Management support together with civic virtue display to have

positive and significant relationship with manufacturing performance (β :.525; $p < 0,01$). The other variables have significant one-to-one correlations with manufacturing performance respectively as individual freedom and autonomy (r :.325; $p < 0,05$), management and employees' absorption capacity of risk (r :.306; $p < 0,01$), reward availability/reinforcement (r :.414, $p < 0,01$), time availability (r :.296; $p < 0,01$).

However, Innovative performance has the highest correlation with manufacturing performance (r :.587, $p < 0,01$) in the correlation matrix.

5. CONCLUSION

5.1. RESULTS OF ANALYSES

The main aim of this study is to understand how to use managerial tools or arrangements to create a suitable atmosphere for IWBs which is purported as an antecedent of the firm performance. This study explores the effects of creating an intrapreneurial climate on promotive types of behaviors of employees to make firm software that is inimitable in today's global competition leading rapid technological changes. Human Capital in the form of the knowledge, skills and the abilities of the employees can contribute to create dynamic capabilities in order to be adaptive mechanisms (Alpkan et al., 2009:10). However, these capabilities need to be understood not in terms of balance sheet items, but mainly in terms of organizational structures and managerial processes which support change-oriented behaviors or more specifically IWBs (Teece and Pisano, 1994: 4, 6). That's why, while this study tries to explore the ways of gaining dynamic capabilities, the main factor on which the relations constructed is IWBs of employees. Since, the importance lies in the fact that these types of behaviors hold attributes required for the innovation process in which ideas are captured, filtered, funded, developed, modified, clarified and eventually commercialized (Mc Lean, 2005: 240). Therefore, the links are constructed between intrapreneurial climate and performance criteria via IWBs.

Intrapreneurial Climate constituents and the IWB processes were discussed comprehensively in the second section based upon the conceptual and empirical studies done before in the management literature to give insights about the meaning of the concepts and the relationships among them. Similarly, the mostly used performance criteria were selected upon the basis on the previous studies tried to find the effects of several factors on firm performance. Upon the findings of the literature, the model paving the way for hypotheses development was proposed in this section. After the research methodology was represented in the next section, analyses and findings including principal component analysis with factor solutions, reliability and validity tests, descriptive statistics based upon the correlation matrix and regression analyses testing hypotheses were explained respectively. In this part, research model was revised in the direction of tests results and the six sub-models were created by

partitioning the ultimate research model (see Figure 4.1). In the sub models, the supported and unsupported relations were diagrammed to follow the stages of hypotheses testing.

As to the factor solutions presented on Tables 4.1 and 4.2, every factors loaded highly on a single factor proved that the structure is unidimensional. On the other hand some factors load on different on contrary to expectations especially presupposed five factor solution for performance criteria reduced to four factors.

Correlation analyses revealed that all the variables are significantly related to each other except freedom and financial performance. Further more, the findings of correlation analysis giving an implicit knowledge about the simple regression between two variables shows that *ceteris paribus*, the sub dimensions of intrapreneurial climate effects firm performance.

Managerial support on idea, task and socio-emotional basis is needed for enforcing innovation and creativity, thus for overall firm performance. Managerial level deeds signaling what they value within the firm are important reference points for rationalization of behaviors so stability of giving these types of support and enthusiasm to sustain giving encouragement is required for successful firm performance. Even work or task support as providing necessary resources such as equipment, information, man power or expertise for employees (Hornsby et al., 2002: 259; Hornsby, Kuratko, Shepherd and Bott, 2009: 238) to generate and implement new ideas (Hornsby et al., 1993: 34-35; McLean 2005: 235-237; Alpkhan et al., 2010: 8; Mumford et al., 2002: 739-740) are given, if employees have not a bootleg time (Fry, 1987: 5) to observe, imagine, experiment and develop novel ideas and implement projects (Alpkhan et al., 2010: 8), they could not be successful to direct energies to be innovative that affects firm performance positively. Also decentralized structure giving some degree of decision making latitude in defining and executing (Scott and Bruce, 1994: 584; Ahmed, 1998: 37; Kuratko et al., 2005: 703; Hornsby et al., 2009: 238-239) a task, create a synergy in which collective reasoning is succeeded. Both extrinsic and intrinsic outcomes that are allocated on the basis of creativity and innovativeness, signals the organizational worth and IWBs will become the general and dominant way of behaving which lead to effective

functioning of the organization. On the other hand, punishment results from prudent mistakes in order to develop and perfect innovative ideas (Galbraith, 1999: 12) could be detrimental for promising projects, because at that time individuals who are exposed to personal, social or psychological risks inherent in the process anticipating any deviations from the current practices (Lumpkin and Dess 1994: 144; Galbraith, 1999:10; Bamber and Owens, 2002: 216) could not tolerate and/or absorb the risks due to their punitive consequences. That's why the way in which mistakes are handled in organizations possibly determines whether an employee feel free or not to behave in an innovative fashion. If mistakes are regarded as an important learning opportunity, employees will be easily encouraged to generate new ideas without being harmed and without the fear of losing their jobs or reputations within the firm (Stevenson and Jarillo, 1990: 24; Hornsby et al 2002: 258; Martins and Terblanche, 2003: 72). These innovative acts will determine the position of the firm in the face of competitiveness.

However; when the regression analyses results are analyzed, two dimensions of intrapreneurial climate was found to affect positively IWBs of employees within a firm. Therefore, hypotheses of Hypothesis 1a and Hypothesis 4a are supported; the others lose their effects on IWBs and the relations become weaker. A plausible explanation for this may be the existence of implicit hierarchical relation between these variables so managerial support and reward availability are on the higher level of hierarchy. As in the parallel with the findings of previous regression analyses, the interaction effects of both civic virtue and climatic factors reveals that management support for innovative initiatives and reward availability contingent upon innovative performance of individuals more positively affect IWBs of employees if individual extend their job breadth by holding civic virtue. That's why both promotive-affiliative types of behaviors and managerial tools have capability to affect promotive challenging types of behaviors so both Hypothesis 1b and Hypothesis 4b are supported.

These results denote that a person's immediate social environment is one of the important sources of information (Salancik and Pfeffer, 1978: 226; Woodman et al., 1993: 303-304).

Thus, messages coming from the managerial level provide verbal and non-verbal cues which individuals use to construct and interpret events (Salancik and Pfeffer, 1978: 226).

If the suitable conditions are created and perceived in the right direction within an organization, IWBs which characterize creativity and overall innovativeness of an organization could be considered valuable and the members are highly likely to embrace these types of behaviors.

These IWBs are designed to improve one's task or the organization's performance (Podsakoff et al., 2000:524; Choi, 2007:468). This assumption was found significant according to the regression analysis in which IWBs positively affect innovative performance of firms; hence Hypothesis 6 is fully supported even the other variables included in the model, its positive impact on innovative performance remains.

Another supported relation is between innovative performance and the other performance dimensions included in the model. According to the regression results, the Hypothesis 7, Hypothesis 8 and Hypothesis 9 are supported respectively. This means that innovative performance exert significant and positive effects on financial, new product and manufacturing performance.

Together with these findings, this study has some merits in clarifying the cause and effect relations. First of all, besides taking IWBs on the center of the model, the possible interaction effects of both climatic factors and the promotive affiliative types of behaviors-civic virtue, was explored so unlike the previous research tried to find the possible effects of intrapreneurial climate on firm performance using different exploratory variables, this type of behavior was included in the model by playing a moderator role.

Secondly, scales measuring the perception of climate and culture, extra-role behaviors were expanded by adding several new items to dimensions and every item in the scale was so structured that they were adapted to Turkish culture in which the

people value collectivist way of life. Therefore, the items were designed to reflect these values by emphasizing the role of *us* rather than the role of *them*.

As the main characteristic of Turkey, the people place premium on collectivist ideas so as to reliability and validity analyses, this scale was so successful to measure what had ought to measure. Thus; by then, new researchers can use this improved scale in their future studies.

Apart from these theoretical contributions, this study also gives some clues for managerial level that is explained in the following section.

5.2. MANAGERIAL IMPLICATIONS

By observing and interpreting the actions of managers, employees are able to explain why things are the way they are and why the organizations focus on certain priorities (Schneider et al., 1994: 18-19).

Individuals are very susceptible to the informational and normative influences of others and learn from them. We watch others and form expectations about how and when we should act (O'Reilly, 1989: 19). In other words, employees try to rationalize their behaviors by referring to the features of the environment which support them; so main reference point is the management deeds. Actions of the management rather than words are tangibles, because employees observe what happens around them and then draw conclusions about the organization's priorities. Later, they set their own priorities accordingly and form perceptions about their organization's imperatives which provide them a new direction and orientation about where they should focus on their efforts (Schneider et al., 1994: 18-19, 1996: 6, 15).

As a managerial implication related to the direct and combined effects of each dimension of intrapreneurial climate, it is possible to suggest that managerial level should be aware of these important responsibilities to direct workers' energies to produce innovative outcomes. True messages should be communicated with the lower levels and they should understand which of the possible causes produced attitudes. There is a need to share the same perspective that attitudes are formed as

consequences of behaviors, informational social influence and evaluations of situational characteristics (Salancik and Pfeffer, 1978: 249-250).

Considering the one to one correlations, all the climate dimensions were found to be related to IWBs positively while taking the combined effects into consideration, management support and reward availability still have significant effects on IWBs. Therefore, management support in terms of idea, task and socio-emotional basis and reward availability both on intrinsic and extrinsic basis have overshadowing effects; the managerial level should be careful firstly to design reward system contingent upon innovative performance and encourage employees to generate new and innovative ideas and/or projects. Then the other tools of management can be used for sustaining innovative initiatives. Without true perceptions of management support and appropriate reward system, the other variables like giving enough time to think and challenge the status quo, having a tolerance for mistakes or decentralization of authority can not be enough to increase IWBs of employees. Strong encouragement and fair reward system may be the strong impetus for employees to initiate change, and the others possibly affect the continuance of these types of behaviors. Besides the challenging types of behavior, affiliative forms of behavior like holding a civic virtue have positive effect on innovative performance of individuals. Because if individuals do not feel themselves as the citizens of the firm, they will not be future oriented and invest their sweat equity. Thus, we can suggest that awareness of these important factors both on the managerial and individual level should be created by education. Since educated people can create practices that strike their roots smoothly and amplify in the organization thereby create an atmosphere and a culture of innovation.

5.3. LIMITATIONS AND FUTURE RESEARCH IMPLICATIONS

Despite the theoretical and practical contributions of this study, it has several limitations. This research could be done in cross-cultural sense so the relations on which this research based could be tested by comparative studies which will be done for example in an oriental culture other than that of North American. The main difference between these cultures is the prevalence of individualistic versus collectivist ways of life reflected in the norms and behavior patterns.

The comparative studies could also be done between developed and developing nations as an extension of this study to test the differences and similarities in terms of the strength and direction of the relations between variables.

In this study, intrapreneurial climate components are assumed to be the main antecedents of IWBs but the antecedents of intrapreneurial climate were not explored. Thus, future studies can be done to explore the effects of the strategies in creating a suitable climate for intrapreneurial acts. Due to the importance of management encouragement supported theoretically, one possible area of study in which the effects of leadership styles on the perception of climate are explored, could be done. The link between intellectual capital and intrapreneurial climate could be constructed in the future.

In addition to these, instead of behavioral aspects, other variables like organizational memory could be incorporated in the model and the effects of intrapreneurial climate on the creation of corporate memory and its impacts on overall firm performance could be studied.

The exploring the combined effects of intrapreneurial climate and five personality traits on innovative work behaviors could be another research area in which intrapreneurial climate perceptions are measured.

Different aspects of innovativeness (e.g. radical vs. incremental or process vs. product) could be taken into consideration and relations could be tested according to the variables' abilities in affecting these types of innovations.

The field study was employed to measure employee perceptions in manufacturing firms, however non-profit organizations could be selected in another study to determine the tendency of their engagement in innovative acts in terms of administrative techniques. The most effective sample could be the faculties of business and engineering in both foundation and state universities. IWBs were measured on the individual level, both R&D and project teams could also be selected for sampling.

Another limitation is that survey method was used to measure perceptions of employees so depends on self –reports and the secondary data sources were not be able to be included in the analyses. In terms of the costs incurred, e-mails should be used as effective ways of returning the completed surveys. Due to the several reasons, many of respondents preferred to return the completed surveys later by themselves or as a group via mail or hand delivery. This causes the inefficient use of time which is the most important resource in today’s life in rush.

The impossibility of finding the absolute truth in social sciences, this study has both contributions and limitations however with its suggestions gave the impetus for further ideas. Besides the merits of findings, the nomological network between the intrapreneurial climate and entrepreneurial orientation is still open to debate.

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APPENDIX-A: Measurement Scales and Respective Factor Loadings I

ITEMS	Factor Loadings
Management Support	
Our firm usually encourages us to actualize our innovative ideas.	,738
Our firm is always very receptive to our new ideas.	,736
Our firm provides several opportunities to realize innovative ideas.	,715
In our firm, developing one's own ideas is encouraged for the improvement of the firm.	,703
Our firm is aware of the new ideas of employees.	,695
Our firm usually provides financial support to get successful innovative projects off the ground.	,661
In our firm, employees are not put back by bureaucratic procedures while carrying out their innovative projects.	,656
Our firm even bends rules to keep promising ideas on track.	,622
In our firm; the exchange of ideas among departments is encouraged to develop new ideas and projects.	,598
Our firm gives a free time to idea owners in order to develop innovative ideas that are believed to be successful.	,583
Our firm has many top managers who have been known for their experience with the innovation process.	,560
In our firm; departmental or functional boundaries are removed with regard to carry out innovative projects.	,554
IWBs	
In our firm, we make the others enthusiastic for the continuity of innovative ideas.	,764
In our firm, we introduce our innovative ideas into our work environment in a systematic way.	,709
In our firm, we take action to realize new ideas that we have generated.	,689
We contribute to our firm with innovative ideas in a commercial and/or social sense.	,675
In our firm, we share original solutions created for problems we encounter to the others.	,672
In our firm, we seek for support for the realization of our innovative ideas.	,660
In our firm, we evaluate/control the social and economic results of our innovative ideas.	,574
In our firm, in the face of difficult situations, we offer new ideas.	,530
Individual Freedom and Autonomy	
I am left on my own how to do my own work.	,788
It is basically my own responsibility to decide how my job gets done.	,752
I feel that I am my own boss.	,625
I am encouraged to use my methods of doing and to be creative to get my jobs done.	,612
Our firm provides the chance to do something that makes use of my abilities.	,589

Individual Freedom and Autonomy (cont'd)	
I almost always get to decide what I do on my job.	,578
Our firm provides me freedom to use my own judgment.	,569
I am not exposed to harsh criticism result from the mistakes I make on the job.	,488
Management and Employees Absorption Capacity of Risk	
In our firm, employees are often encouraged to take calculated risks.	,796
The term "risk taker" is considered a positive attribute for employees of our firm.	,772
In our firm, individual risk takers are often recognized for their willingness to champion new projects, whether eventually successful or not.	,738
In our firm, losses resulted from bona fide mistakes are tolerated.	,539
In our firm, both large and small projects that some will undoubtedly fail are supported.	,479
Reward Availability and Reinforcement	
In our firm, our supervisors will give us a special recognition if our work performance is especially good.	,681
In our firm, outstanding work performance is communicated with upper management.	,617
In our firm, the rewards we receive are dependent upon our work performance on the job.	,601
In our firm, employees with successful innovative projects are offered additional options beyond the standard reward system.	,574
Our firm has mostly promoted employees generating innovative ideas.	,547
In our firm, we know that if we perform well in the job; our job responsibilities will increase.	,510
Time Availability	
I have enough time to think about firm related problems.	,800
I have enough time to get everything done.	,765
During the past three months, I had enough time to develop new ideas related to my job.	,668
My co-workers and I spend time on solving our firm's problems.	,379
Civic Virtue	
We keep abreast of changes in our firm.	,804
We keep up with firm related announcements and news.	,757
We try to be useful by attending functions that contribute positively to our firm's image.	,749

APPENDIX-B: Measurement Scales and Respective Factor Loadings II

ITEMS		Factor Loadings
DIMENSIONS OF PERFORMANCE	Innovative Performance	
	The number of new lines of products or services	,799
	Company's spending on new product development activities	,762
	Having pioneering role in the development of breakthrough innovations in the industry	,754
	An emphasis on R&D, technological leadership and innovations	,747
	Developing innovations in terms of job processes and methods	,733
	The percentage of new products within the product range	,724
	Renewal of administer structure and mentality in accordance with environmental conditions	,681
	The number of innovations protected by intellectual property rights (patent counts, patent applications, patent citations, utility model certificates)	,624
	Capability of introducing new products to the market ahead of competitors	,607
The quality of newly developed products and services	,547	
Financial Performance		
Return on assets (Profit /Total Assets)	,889	
Turnover Profitability (Profit /Total Sales)	,844	
Profitability	,841	
Free cash flow	,819	
Total sales	,633	
Market share	,595	
New Product Performance		
Profit expectations of newly introduced products	,821	
Return on investment expectations of newly introduced products	,731	
Sales expectations of newly introduced products	,684	
Market share expectations of newly introduced products	,663	
Cost of manufacturing	,561	
Manufacturing Performance		
Speed of manufacturing and delivery	,777	
Customer satisfaction	,743	
Quality of manufacturing	,705	
Manufacturing flexibility	,545	

APPENDIX-C: QUESTIONNAIRE



Sayın Katılımcı;

Bu anket formu Yaşar Üniversitesi, Sosyal Bilimler Enstitüsü, İşletme Ana Bilim Dalı'nda yürütülen 'Kurumsal Girişimcilik ve Yenilikçilik Performansı'na etki eden Kurumsal Faktörler' konulu yüksek lisans tezi ile ilgilidir.

Araştırmamız bilimsel bir amaca yönelik olarak tasarlanmış olup kimlik bilgilerinizin kesinlikle talep edilmediği bu çalışmada, sunduğunuz tüm bilginin gizli ve güvenli bir şekilde, bireysel değil toplu olarak ele alınacağını ve ayrıca hiçbir şart ve koşulda kimliğinizin açıklanmayacağını taahhüt ederiz.

Bu çalışmaya katılımınız gönüllüdür. Çalışmanın önemli bir parçasını oluşturan bu anketi doldurmak için süre sınırlaması olmamakla birlikte, anketi tamamlamak yaklaşık 20 dakikanızı alacaktır.

Çalışmamıza yaptığınız katkının değerini bir kez daha vurgular, katılımınız ve ilginiz için teşekkür eder, iyi çalışmalar dileriz.

Saygılarımızla;

Doç. Dr. Çağrı BULUT, cagri.bulut@yasar.edu.tr

Seray Begüm SAMUR, begum_samur@yahoo.com

GENEL BİLGİLERİNİZ				
Yaşınız				
Cinsiyetiniz	<input type="checkbox"/> Erkek		<input type="checkbox"/> Bayan	
Eğitim Durumunuz	<input type="checkbox"/> İlkokul/Ortaokul	<input type="checkbox"/> Lise	<input type="checkbox"/> Üniversite	<input type="checkbox"/> Lisansüstü/ Doktora
Firmadaki çalışma süreniz				
İşletmedeki pozisyonunuz				
Çalıştığınız bölüm				

İŞLETMENİN GENEL BİLGİLERİ	
İşletmenin yaşı	
İşletmedeki çalışan sayısı	
Sektörü	

AŞAĞIDAKİ İFADELERİ DEĞERLENDİRİRKEN LÜTFEN AŞAĞIDAKİ ÖLÇEĞİ KULLANINIZ:

Kesinlikle katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle katılıyorum
1	2	3	4	5

YENİLİKÇİLİK: Bir fikir veya buluşun ticari ve sosyal faydaya dönüştürülmesi.

A. Firmamız; (A bölümündeki bazı unsurların başına gelen ifadedir.)		1	2	3	4	5
YÖD1.	iyileştirilmiş iş yöntemlerinin iş yapış şeklimize aktarılmasında hızlıdır.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YÖD2.	çalışanlar tarafından iyileştirilmiş iş yöntemlerinin iş yapış şeklimize aktarılmasında hızlıdır.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YÖD3.	Firmamızda, büyümenin sürekliliğini sağlamak için çalışanların yeni fikirler üretmesi desteklenir.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YÖD4.	çalışanların yeni fikirlerini her zaman dinler.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YÖD5.	çalışanların yeni fikirlerinden haberdardır.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YÖD6.	yenilikçi fikirler üreten çalışanları çoğunlukla terfi ettirmiştir.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YÖD7.	yenilikçi fikirlerimizi gerçekleştirmemizde çoğunlukla bizi destekler.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YÖD8.	Firmamızda, çalışanlar projelerini yürütürken bürokratik işlemlerle yavaşlatılmaz.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YÖD9.	yenilikçi fikirlerin devamlılığı için katı kuralları dahi esnetir.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YÖD10.	yenilikçilik süreçlerindeki tecrübeleri ile tanınan birçok üst düzey yöneticiye sahiptir.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YÖD11.	başarılı yenilikçi projelerin hayata geçirilmesi için gerekli olan kaynağı çoğunlukla tahsis eder.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YÖD12.	yenilikçi fikirlerin hayata geçirilebilmesi için çeşitli fırsatlar sunar.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YÖD13.	başarılı olacağı düşünülen yenilikçi fikirlerin geliştirilebilmesi için fikir sahiplerine serbest zaman imkânı sunar.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YÖD14.	Firmamızda, yenilikçi projelerin yürütülmesi söz konusu olduğunda departmanlar arası sınırlar ortadan kalkmaktadır.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YÖD15.	Firmamızda yeni fikir ve projelerin geliştirilebilmesi için departmanlar arası fikir alışverişi teşvik edilmektedir.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B.		1	2	3	4	5
TY1.	Kendimi işimin patronu gibi hissediyorum.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TY2.	İşlerimi yürütürken yaptığım hatalardan dolayı sert bir eleştiriye maruz <u>kalmam</u> .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TY3.	İşimi kendi yöntemlerimle yapmam ve iş yapış şekillerimde yaratıcı olmam konusunda destekleniyorum.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TY4.	Firmamız karar vermemde özgürlük tanır.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TY5.	Firmamız kişisel yeteneklerimden faydalanmama imkân tanır.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TY6.	Gün içinde hangi işimi ne zaman göreceğime dair karar vermemde özgürlüğüm vardır.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TY7.	İşlerimin yürütülmesinde izlediğim yol kendi sorumluluğumdadır.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TY8.	Hemen her zaman işimle ilgili kararları ben veririm.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TY9.	İşlerimi görme şeklim bana bırakılmıştır.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TY10.	Günlük işlerin yerine getirilmesinde izlemem gereken adımlar önceden <u>belirlenmemiştir</u> .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C.Firmamızda; (C Bölümündeki unsurların başına gelen ifadedir.)		1	2	3	4	5
Ö1	yöneticiler görevlerin yerine getirilmesinde engelleri ortadan kaldırarak bizlere yardımcı olurlar.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ö2	alınan ödüller yürütülen işlerde gösterilen performansa bağlıdır	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ö3	sergilediğimiz performans artarsa iş ile ilgili sorumluluklarımızın artacağını biliriz.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ö4	sergilediğimiz performansta belirgin bir yükseliş olursa yöneticimizin özel ilgisi kaçınılmazdır.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ö5	çalışanların göze çarpan performansları bir üst kademeye aktarılır.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ö6	çalışırken zorlukları aşmamda yöneticilerim bana destek olur.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ö7	başarılı yenilikçi fikirlere sahip çalışanlara ek imkânlar sunulur.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D.		1	2	3	4	5
ZT1	Geçen üç ay içinde işimle ilgili yeni fikirler üretmek için yeterince zamanım oldu.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ZT2	Günlük işlerimi yürütmek için yeterli zamana sahibim.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ZT3	Sorumluluğumdaki işleri her zaman planlanan süre içinde tamamlarım.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ZT4	Firmamızın sorunlarına çözüm üretecek yeterli kişisel zamana sahibim.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ZT5	İşlerimi yürütürken zamanımın <u>yetmeyeceği</u> hissine sık sık kapılırım.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ZT6	Firmamızla ilgili problemleri çözmek için mesai arkadaşlarımla birlikte vakit geçiririz.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E.		1	2	3	4	5
RH1	Firmamızda, başarısı kesin olmasa da birçok irili ufaklı projenin hayata geçirilmesi desteklenmektedir.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RH2	“Risk almak” firmamız çalışanları için olumlu bir özellik olarak değerlendirilir.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RH3	Firmamızda çalışanlar hesaplı risk alma yolunda desteklenirler.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RH4	Firmamızda kişisel risk alanların projeleri başarılı ya da başarısız sonuçlansın, kendi projelerinin en iyi olması yolundaki hevesleriyle tanınırlar.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
RH5	Firmamızda, sonuçta başarısız olsa dahi iyi niyetli hatalardan kaynaklı kayıplar her zaman tolere edilir.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F. Firmamızda; (F bölümündeki bazı unsurların başına gelen ifadedir.)		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YD1	zor durumlarla karşılaştığımızda yeni fikirler öneririz.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YD2	işimizle ilgili yeni çalışma yöntemleri, teknik ve araçları ileri süreriz.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YD3	karşımızda çıkan sorunlara ürettiğimiz orijinal çözümleri diğerleri ile paylaşıyoruz.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YD4	ürettiğimiz yeni fikirleri gerçekleştirmek için harekete geçeriz.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YD5	yenilikçi fikirlerimizin gerçekleştirilmesi için destek ararız.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YD6	yenilikçi fikirlerin sürekliliği için diğerlerini de heveslendiririz.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YD7	yenilikçi fikirlerimiz ile firmamıza ticari/sosyal fayda sağlarız.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YD8	yenilikçi fikirlerimizi çalışma ortamımıza sistematik bir biçimde sunarız.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

YD9	yenilikçi fikirlerimizin ekonomik ve sosyal sonuçlarını değerlendirir/kontrol ederiz.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G.		1	2	3	4	5
SE1	Firmamızda; katılımımızın zorunlu olmadığı hallerde dahi önemli olduğunu düşündüğümüz toplantılara katılmaya çalışırız.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SE2	Firmamızın imajına değer katacağını düşündüğümüz faaliyetlerle faydalı olmaya çalışırız.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SE3	Firmamız faaliyetleri ile ilgili gündemi takip ederiz.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SE4	Firmamızın duyuru ve haberlerini özenle takip ederiz.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Son üç yılı (2007- 2010) dikkate aldığımızda, firmanızı geçmiş dönemlere kıyasla aşağıdaki her bir başarı kriteri açısından değerlendiriniz.

Ortalamanın çok altı	Ortalamanın altı	Ortalama	Ortalamanın üstü	Ortalamanın çok üstü
1	2	3	4	5

H.		1	2	3	4	5
ÖY1	Yeni ürünleri rakiplerden önce pazara sunabilme	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ÖY2	Mevcut ürün yelpazesinde yeni ürünlerin oranı	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ÖY3	Yeni ürünlerin geliştirilmesi adına yapılan harcamalar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ÖY4	Yeni ürün ve hizmet projelerinin sayısı	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ÖY5	İş, süreç ve yöntemlerine dair geliştirilen yenilikler	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ÖY6	Geliştirilen yeni ürün ve hizmetlerin kalitesi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ÖY7	Fikri mülkiyet hakkı altına (patent, patent başvurusu, tasarımların tescil edilmesi, marka tescil edilmesi, faydalı model belgesi) alınmış yeniliklerin sayısı	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ÖY8	İdari yapı ve zihniyetin çevresel şartlara göre yenilenmesi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ÖY5	ARGE faaliyetlerine, teknolojik liderliğe ve yeniliklere verilen önem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ÖY6	Sektörde önemli yeniliklerin geliştirilmesinde üstlenilen rol	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I.		1	2	3	4	5
YUP1	Pazarda sunulan yeni ürünlerin beklenen satış hedefi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YUP2	Pazarda sunulan yeni ürünlerin beklenen karlılık hedefi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YUP3	Pazarda sunulan yeni ürünlerin beklenen yatırım getirisi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YUP4	Pazarda sunulan yeni ürünlerin beklenen pazar payı büyümesi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IMP1	İmalat kalitesi	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IMP2	İmalat maliyeti	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IMP3	İmalat Esnekliği	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IMP4	İmalat ve Teslimat hızı	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

PZP1	Müşteri memnuniyeti	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PZP2	Toplam satışlar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PZP3	Pazar payı büyüklüğü	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FP1	Ciro karlılığı (Kar/Toplam Satışlar))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FP2	Aktif Karlılığı (Kar/Toplam Varlıklar)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FP3	Firmanın genel karlılık durumu	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FP4	Yatırım dışı nakit akışı	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX-D: LIST OF HYPOTHESES

- **Hypothesis 1.a:** Management support positively affects IWBs of employees within a firm.
- **Hypothesis 1.b:** The effects of Management Support on IWBs of employees are moderated when they hold civic virtue within a firm.
- **Hypothesis 2.a:** The allocation of free time to employees positively affects their IWBs.
- **Hypothesis 2.b:** The effects of allocation of free time to employees on their IWBs are moderated when they hold civic virtue within a firm.
- **Hypothesis 3.a:** Autonomy given to employees positively affects their IWBs.
- **Hypothesis 3.b:** The effects of autonomy given to employees on their IWBs are moderated when they hold civic virtue within a firm.
- **Hypothesis 4.a:** Appropriate reward system positively affects IWBs of employees within a firm.
- **Hypothesis 4.b:** The effects of appropriate reward system on IWBs of employees are moderated when they hold civic virtue within a firm.
- **Hypothesis 5.a:** High level absorption capacity of the management and the employees positively affects their IWBs within a firm.
- **Hypothesis 5.b:** The effects of high level absorption capacity of the management and the employees on their IWBs are moderated when they hold civic virtue within a firm.
- **Hypothesis 6:** IWBs positively affect innovative performance.
- **Hypothesis 7:** Innovative performance positively affects manufacturing performance.
- **Hypothesis 8:** Innovative performance positively affects new product performance.
- **Hypothesis 9:** Innovative performance positively affects financial performance.