Factors Affecting Retirement Behavior Before and After Retirement, a Comparative Approach

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ABSTRACT

This study uses data from already retired individuals and those still in the workforce above 50 years old in Iran, to investigate factors that may influence their decision to retire. This comparative approach between retired individuals and those approaching retirement makes the thesis unique. Specifically, we have looked at gender, age, pension level, number of financial dependents, self-perceived health, total assets and the effects of work family balance on the retirement decision.

Our results indicate that age influences the retirement decision in retired group and the perceived retirement decision in the working group. The older individuals seem to continue working or perceive that they will continue to work, whereas the younger individuals perceive that they will retire early. Gender, self-perceived health, house ownership, capital accumulation seem to influence the perceived retirement age among the working group.

Key words: Official retirement, Perceived Retirement Age, Actual Retirement Age, Working Group and Retired Group

ÖZ

Çalışma Iran'da emekli olmuş ve 50 yaşın üzerinde olan ve çalışma yaşamında olan iki grubu emekli olma kararını etkileyen faktörleri belirlemek için incelemiştir. Bu iki kesimin karşılaştırmalı olarak incelenmesi çalışmanın ayırt edici bir özelliğidir. Çalışmada özellikle cinsiyet, yaş, emeklilik geliri, bakmak zorunda olduğu kişi sayısı, sağlık ile ilgili algısı, toplam varlıkları ve iş yaşam dengesi incelenmiştir.

Çalışma sonuçları yaşın çalışmakta olan grupta hedeflenen emeklilik yaşını hem de emekli olan grupta gerçekleşmiş emeklilik yaşını etkilediği görülmektedir. Buna yaş ilerledikçe emeklilik kararı ertelenmekte fakat yaş düşükken hdeflenen emeklilik yaşı daha düşük tutulmaktadır. Cinsiyet, sağlık algısı, ev sahipliği, toplam varlıklar da çalışan grupta hedeflenen emeklilik yaşını düşürmektedir.

Anahtar Kelimder: Official retirement, Perceived Retirement Age, Actual Retirement Age, Working Group and Retired Group

Dedicated to my mom and my dad, their conceptual review of life provided evidence that honestly is not stupidity.

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Chapter 1

INTRODUCTION

The world is aging rapidly. From the beginning of the 21th century the issue of aging is gaining more importance every year. One of the many issues brought up by aging is the retirement. Aging combined with a tendency towards early retirement in new generations has created a new problem for the global economy. Nowadays many countries are suffering from high budget deficits. One of the main reasons behind budget deficits is the heavy burden of social security services on governments. With aging population and early retirement, the burden of social security services especially pensions is putting far more pressure on the governments compared to the past. This study will cover the reasons behind retirement using an empirical research conducted in Iran. We try to see whether possible characteristics of an individual before retirement and the estimated retirement age she perceives holds true to the retirement age of similar people who are already retired.

Governments that are recovering from the recent global economic crisis will have a hard time lowering their already high budget deficits and have to cut on expending in education and other vital budgets needed to ensure their long run economic growth perspective. Take the case of Japanese government which is suffering from high budget deficit and negative economic growth (Milliken and Dmitracova, 2012). In this situation the Japanese government has injected billions of dollars to the domestic economy to encourage more investment and consumption, the central bank has

reduced the interest rate to near zero and there are talks about the introduction of a negative interest rate (Bank of Japan, 2013). An aging population in the long run deprives Japan of any chance of economic flourish and no matter how hard the Japanese government try to encourage investment and economic growth since there are less young people to pay tax every day the government cannot hope to be rid of its budget deficit (Bloom, Canning, and Fink, 2013). In this situation the Japanese government and other governments having the same situation will have no chance but to increase the retirement age and lower the pensions in the long run so that the government can hope to have more tax income and less social security budget and therefore containing its budget deficit (Warnock, 2013). In one of the most astonishing remarks a Japanese minister has asked the country's elderly to die sooner because the government can no longer afford their pension (McCurry, 2013). This is yet another example of how desperate the governments are, facing the aging population.

Many believe that in order to solve this problem we should study the causes of it, since the start of the 20th century the world has experienced a tremendous progress both economic and scientific, many diseases which claimed the lives of millions in the past have been cured and medical science has undertaken such progress that enabled ordinary people to live as long as 100 years. When in the past there was this strong possibility of world being so populated that we can no longer feed ourselves, today due to the technological progress in agriculture the hunger has been contained more than ever and we are sure to be able to feed a much more populated earth, on the other hand progress in social science made the people more responsible for their children and their education and wellbeing, this has made the families smaller each generation and all together the low child birth rate and the higher life expectancy together created the aging populations of today, by looking at these facts we can understand that there

is a paradox about the different stages of one's life. 100 years ago a man was considered an adult as soon as 16 years old and was considered old at 50 years old eventually there was a rare opportunity for him to see his 60^{th} birthday but today a man is considered a real adult at about 24 years old and still considered old at 50 years old and has a high chance of see his 80^{th} birthday or even live more than 100 years. People can be encouraged to work longer and behave like a middle aged person when they are over 50 and this can be done by first encouraging them not to retire early.

We must start by looking at the definition of old age in business terms by encouraging the people not to retire early and continue to work, to do this we need to conduct a research on the people who are already retired or those who are about to retire to find out what factors could possibly delay their retirement decision or bring it earlier and then we can try to focus on promoting those factors which are delaying the retirement decision and eliminating those factors which are bringing retirement earlier. Also in today's developing economies there is still a high rate of youth unemployment and this is perceived as the main challenge for many of the developing countries government, while in developed countries the research on factor affecting retirement decision means ways to delay their old work force retirement through eliminating negative parts in developing countries we could try to emphasize on the negative parts in order to persuade the work force to choose an early retirement and open up space for younger people looking for work. For example if in a developed country emphasizing on factor A will increase the average retirement age by 2 in a developing country we could try to eliminate factor A in order to make older work force to retire 2 years earlier.

Also according to the United Nations estimation the population of developing countries is aging faster than expected to an extent that the Chinese government

announced that they are expecting the country's population to age and become an old population earlier in 21th century, also other developing and emerging countries are also reporting that their population is becoming older every day (Powell and Cook, 2008). This means that the research on the developing countries population today is far more important especially since the emerging economies are expected to play a far more vital role in the world economy in the future and countries like the BRICS will have a large share of the world economy while having almost half of the world's population and one must always remember that the main strategic advantage of these countries and other developing and emerging countries is their almost endless human capital which is ensured by a high birth rate and a young population but since that population is aging every year studying these countries work force and their attitude towards retirement will play a far more important role than only youth employment in future.

Unfortunately today the main population research is focused on the developed countries because they are in a much worse situation and their governments which are also recovering from the global economic crisis are facing major demographic obstacle when they are trying to reduce their budget deficit and stimulate growth, simply the aging in the developed countries is so serious that there is not enough tax payers and young workers to pay for their country's huge social security costs and on the other hand there are so many old people in the country that forces the government to keep up with their social security program or risk social and even geopolitical unrest. The whole aging problem in the developed countries made the world to nearly forget the threat of aging in developing and emerging countries while we are pouring resources into demographic researches for countries like japan we are ignoring or at least not heeding enough to the early warnings of aging in countries like china and this will

most likely causes a more severe problem for the world in near future because when we look at the aging problem and when we try to empower old people it is mainly for the purpose of reducing costs while empowering the old will not also reduces the social security costs but also the new empowered elderly will contribute to their country's economy and the world's. This concept will gain a much stronger position when we realize that the developing economies are more labor abundant than their more developed counterparts. For example Vietnam's economy is more dependent on labor than the Japanese economy which is capital abundant and relies more on high and semi skill labor force, in other words the quantity of labor in the developing countries is far greater than the quantity of labor in the developed countries and the inevitable aging problem which is according to the UN and also their own governments is only a few years away (Powell and Cook, 2008) has the potential of undermining not only the domestic economy but slowly lowering the entire world's production.. Despite the great importance of the developing world's demographic studies the main body of researches has been done in the developed countries and only a few scattered researches has been done in labor abundant countries since the aging has not affected these countries yet and also because many developing countries still lack a solid population data or even a social security system to make their respective government more interested in conducting such studies (Justino, 2003), this reluctant view of the aging is so severe that many decision makers still consider the aging problem only a security threat which deprives a country from a large manpower to be conscripted in times of war. Thankfully the situation is not that bad in all developing countries and in many countries like India there is already an established social security program and it is improving and reforming every day (Justino, 2003) and we can conduct research

based on their situation and then we can extend its result with an acceptable level of accuracy to other countries of the same culture and demographic situation.

Previous researches which covered the retirement decision, the factors affecting it or its consequences both micro level and macro level were almost completely conducted in developed countries. One of the first studies which covered the retirement concept was published in 1977. Quinn (1977) studied the microeconomic determinants of early retirement in the US. Feldman (1994) conceptualized the early retirement decision in the US. A similar research has been done in Australia studying the factors affecting the retirement decision, (Shacklock and Brunetto, 2005). McManus, Anderberg and Lazarus (2007) found that deciding to not to retire and staying in the work force can be considered a win win situation in the US. Clark, Ambrosio, Mcdermed and Sawant (2006) studied the role of information and education in the retirement decision in the US. Kooij, de Lange, Jansen and Dikkers (2007) researched on the factors motivating older workers to continue to work in Netherland. Duval (2003) published the retirement effects of old-age pension and early retirement schemes in OECD countries. Luo Lu (2012) studied on the factors affecting old work force (above 60) motivation to continue to work in Taiwan. Despite the recent efforts to study the nature of retirement in the developed countries in the developing countries there is still a lot of work to do.

Lack of interest in research and lack of data has made the world to nearly forget about the immediate threat of aging in the labor abundant developing economies so I want to conduct a research on the factors affecting retirement in a semi developed country which has already an established social security system and a rich available data about its population. In Iran the social security system was established more than a century

ago (The Civil Servants Pension Organization, 2013) and also a regular head counting covering the entire population is done every 10 year and since 2006 the head counting is done every 5 years, more importantly the 2012 head counting revealed that the country is aging extremely fast and the birth rate is falling dramatically while the health care is improving every day bringing the average Iranian life expectancy above 70 years old. The alarming result of the 2012 head counting highlighted the threat that the world economy will be facing in near future and in the face of nearly absolute lack of research on old age labor force in the developing countries I decided to conduct my research in Iran. The Iranian society is a transitioning one while the country is considered a semi developed one, showing both the developed and under developed characteristics. Data acquired in countries such as Iran can be used in developed and under developed countries since Iran is on the half way of development and is similar nearly to both developed and under developed countries. Having the 17th biggest economy in the world in the last Persian year (2012-2013) alone over a quarter of a million people were retired (The Civil Servants Pension Organization, 2013) while a portion of them will return to the job market after retirement to find job in the private sector and enjoying their salary as well as their pension paid by the government. This especial concept that I call official retirement is common, while in the developed countries the retirement mostly means that one will stop working in Iran the official retirement means that one will start receiving pension from the government and is also able to find a new job regardless of her previous job whether she was working for the public sector or the private sector. In this special situation the real retirement comes when someone decides to "retire" from working and rest whether its due to her health or it has other reasons, this makes Iran a perfect ground to conduct a research on factors affecting the ultimate "retirement" decision from one's personal perspective since the

real retirement is considered only a personal question whereas in most countries especially the developed ones retirement decision is highly dependent on the government policy and because of the broad and integrated labor regulation an individual is much more likely to stop working after retirement.(Dinapoli, 2013)

All these discussed reasons makes Iran the perfect choice to start conducting research on the factors affecting retirement. This study aims to try and understand the factors affecting perceived retirement decision in those who are still working and compare it to the factors affecting real retirement decision in those respondents already retired.

This study uses data from already retired individuals and those still in the workforce older than 50, to investigate factors that may influence their decision to retire. This comparative approach between retired individuals and those approaching retirement makes the thesis unique. Specifically, we have looked at gender, age, pension level, number of financial dependents, self-perceived health, total assets and the effects of work family balance on the retirement decision.

Chapter 2

CONCEPTUAL DEVELOPMENT AND HYPOTHESESE

In the United States which is a developed country women earn almost 10000$ less than men on average (U.S. Census Bureau, 2010). This income gap can be much wider in developing countries where the participation rate of women in the economy is much lower than developed countries. The legal gender discrimination on retirement is common in developing countries. In Iran a male with 25 years of service will be retired whereas a female with 20 years of service will be eligible for retirement (The Civil Servants Pension Organization, 2013). Other legal issues which hold the men responsible for the household expenditures which free women from the burden of financial responsibility and the social norms which regard women as merely housekeepers push women towards earlier retirement. This may be one of the main differences between the developing countries and the developed countries. In Iran during the last Persian year only 30% of the retired citizens were women (The Civil Servants Pension Organization, 2013) while in Australia 58.3% of all age pensioners were women (Women and super, 2013) although women generally live longer than men and will receive pension longer than them and but in Iran and many other countries the retirement age for women both legally and unofficially is lower than men since the society still accounts men responsible for economic activities. By implementing early retirement for women government can try and provide their jobs for young unemployed men who are considered responsible for their household economy.

From the discussions mentioned above we can guess that in developing countries women generally retire sooner than men. Thus our first hypothesis will be:

H1. Women retire sooner than men.

The theoretical debate on the relationship between pension and retirement decision is quite different when it comes to different economic situations. Factors like tax which is non-consistent between one country and another plays a key role in deciding whether the pension results in an early retirement or postpone it. One of the first theoretical arguments on social security effect on retirement decision mentions that social security is irrelevant for some people near retirement while for others it is causing them to retire earlier. For the first group, public saving would substitute for private saving leaving total labor supply unaffected, while for the second, Social Security "acts as a combination of an annual lump sum grant and a tax on earnings after the standard retirement age" (Feldstein, 1974). Based on this argument further research suggests that social security can be defined for dates other than retirement age and may cause early retirement due to an implicit tax on post 62 earnings for US citizens (Kotlikoff, 1979). While tax plays a key role in economic decision for the developed countries, in developing countries due to ineffective administration and taxing and especially in oil rich countries like Iran taxation has a much lower importance since the governments relies more on public energy sector to fund herself. Trying to reach a more general theory on the relation between social security and retirement decision further researches were conducted. An argument introduced in 1981 which looked at the retirement decision in a more general theme. Like its predecessors this argument was focused on the notion of social security wealth (Pellechio, 1981). That research argued that different individuals supply different amount of labor according to their respective

perceived value (Pellechio, 1981). Using this theory one can assume that if the market wage and its perceived value exceeds the reservation wage which in this case is the social security benefit (Pellechio, 1981) and also the potential wage for working after the official retirement which is common in developing countries. In this model if we assume that the current market wage is equal to the potential wage or working after the official retirement one can assume that social security benefit increases the perceived value of the retirement. However in this research the focus in on the real retirement which is different from the official retirement, in this situation the social security cannot exceed the market wage but as the social security wealth increases so does the perceived value of the retirement. Eventually we can assume that increasing the social security wealth even in real retirement case directly affects the retirement decision. This is the main theoretical argument that makes us assume social security benefit directly affects the retirement decision.

After mentioning the theoretical arguments this research turns toward empirical researches. Many of the early empirical researches in developed countries found no significant relationship between the pension and the retirement decision. One study in particular concluded that the current wage has no effect on retirement only in one particular group (Pellechio, 1981). That study found that for employees over 65 years old in the US the current wage has a negative effect on retirement. Note that in this research we assume that current wage and retirement wage are on the exact opposite side when we use them in a perceived value model. If current wage has a negative effect it is due to increasing the current market value while the retirement wage will have a positive effect on retirement since it is increasing the retirement perceived value. Due to the lack of sufficient data on empirical studies on the pension and social

security wealth we focus on the empirical studies on the current wage and assume the opposite for the pension.

Studying the current wage effect on retirement several studies found that higher current wage strongly postpones the retirement. Studies reaching this conclusion are Boskin, Boskin and Hurd with their gross wage measure, Burkhauser (1980), Burkhauser and Quinn, Clark and Johnson, Kotlikoff, Pellechio (1978), and Sammartino (1980). On the other hand one study found that current wage actually has a statistically positive effect on retirement decision (Hall and Johnson, 1980). About the pension effect on retirement there are some empirical studies that suggest workers will retire significantly earlier if they face a reduction of their pension for postponing their retirement (Burkhauser, 1979). But "even the best empirical studies have considered the patterns of pension benefits only at two possible retirement ages" in the US (Fields and Mitchel, 1981). One study finds that reducing Social Security benefits by 20% would cause workers to delay exit from the labor force by only three months (French, 2002). But in the developing countries since the social security service is not as vast and effective as their developed counterparts, one can say increasing pension for a third world worker significantly increases her chances to retire earlier knowing the fact that she will face less difficulties. Remember that by using the term retirement here we mean stop working for pay.

By taking into account the empirical and theoretical studies in this field we can conclude that our second hypothesis is:

H2. Increasing the pension will result in earlier retirement.

Although it is widely recognized that retirement is a family affair, affecting both the retiree and her spouse (Szinovacz, Ekerdt, & Vinick, 1992), most studies still treat retirement as an individual decision. Research is primarily focused on individual factors and the impact that these factors have on individuals' retirement processes (Beehr, 1986; Feldman, 1994; Slevin & Wingrove, 1995; Talaga & Beehr, 1989; Leonesio, 1996). On the theoretical basis the approval by the family members and especially spouses has a direct effect on retirement decision (Thompson, McDonald and Bumpass, 1990). This means that if an individual is facing the retirement decision his family's situation in financial-economic scale, leisure scale and the health status of the family members will significantly affect their retirement decision (Henkens, 1999). Individual facing a same retirement option will choose differently due to their different households (Henkens, 1999). Having similar opinions in the family can result in earlier retirement if the individual wants to retire early while having opposite opinions in the family will postpone the retirement decision (Henkens, 1999). Most married couples pool their financial resources and see themselves as an integral economic unit (Giesen & Kalmijn, 1997; Treas, 1993). Also "greater financial resources that enable couples to sustain their preretirement standard of living will increase older workers' intentions to retire early, and partners' support for retirement" (Henkens, 1999). These theoretical arguments was mentioned by studies conducted in developed countries while in developing countries the burden of children's financial needs will be added to this calculations. Even in developed countries the need to pay for children's education is considered a major player in the retirement decision making process. In the current economic situation many families in the developed countries are taking from their retirement funds to pay for their children's education (Epperson, 2013). This is mainly

because of the current economic situation which is putting pressure on student loan providers like Sallie Mae and the developed countries have to cut back on such support plans for covering their young citizen's education (Epperson, 2013). The burden of children education will be much heavier in developing countries since almost no such loan providers and support systems exists. In Iran the education is mostly paid by government thorough state owned universities and state owned public schools but looking at the Iranian social and cultural norm the families are still responsible for the basic financial needs of their children and youth unemployment is astonishingly high in Iran which again forces parents to support their children even after graduation. According to the World Bank the state reported youth unemployment in Iran is 23% (Trading economies, 2013). While 52% of the youth females with university education are currently unemployed (Trading economies, 2013). For other developing countries the situation is quite the same since the world is only just recovering from the 2007 financial crisis and many countries are suffering from high youth unemployment. Also in other developing countries the state funded high education is a rarity. These theoretical arguments point to the fact that for parents having lots of children to fund retirement is just a luxury they cannot afford. Again we emphasize on the fact that by using retirement we mean stop working for pay and rest while the official retirement means quitting one's current job and return to the job market while enjoying the social security benefits.

Empirical studies on this matter is even more supportive of the role children's education plays on retirement decision and plans. The report "How America Saves for College" surveyed more than 1,600 parents with children ages 18 or younger and found half of parents said they were focused on college savings, while 60 percent were focused on saving for retirement. Also 42 percent of parents who are not saving for

college said they are saving for retirement (Sallie Mae, 2013). The College Savings Foundation's 2012 parent survey found that 22 percent of 529 owners have saved between $10,001 and $25,000, while only 9 percent of non-529 account owners have saved a similar amount. Likewise, 18 percent of 529 plan owners reported saving between $25,001 and $50,000. Only 4 percent of non-529 account owners managed to save as much. Overall, parents who have not opened a 529 plan are the least effective college savers — nearly half have no college savings. The 529 account is a special offering which enables parents to save for their children's education and then withdraw the money without paying tax in the US. (Epperson, 2013). These empirical studies shows that especially in today's economic situation the number of financially dependent family members are affecting retirement plans and decisions more than ever. We can maintain that our third hypothesis is:

H3. Individuals with less financially dependent persons will retire sooner.

The effect of health and perceived health on retirement decision has been the subject of many studies. Nearly all of these studies were conducted in the developed countries. Understanding the non-financial factors affecting the retirement decision is becoming more and more important for policy makers and policy researchers (Bazzoli, 1985). During the 80's the early retirement was spreading in the developing countries for example the labor force participation rate of men ages 60 through 65 declined from 83 percent in 1955 to 62 percent in 1978" (Bazzoli, 1985). After the global financial crisis understanding the non-financial factors affecting the retirement decision gained more importance. In earlier research the measures used were almost completely based on self-reported health situation (Bazzoli, 1985). In other words all these early researches were asking people: Are you having a health condition that limits your job

performance? (Bazzoli, 1985). The use of these measures were often criticized. Many studies argued that an individual maybe claiming poor health right after retirement in order to justify the reduced labor force involvement (Bazzoli, 1985). But many theories still point to the fact that health situation plays a role in the retirement decision. Some researches tried to avoid the problems associated with early phase after retirement. In one particular example the study analyzed the labor force transition between 1973 and 1975 and they studied those who were employed in 1973 based on their health report prior to their retirement in 1975 (Burkhausera and Quinn, 1981). Regardless of their measures nearly all of these studies focused on the life cycle problem of an individual. The life cycle problem confronting an individual involves, in general terms, the choice of optimal paths of consumption and leisure so as to maximize household utility subject to budget and time constraints. One article assumed for simplicity that the household's utility is maximized when the head's utility is maximized and that the husband's retirement decision is independent of that of his wife (Bazzoli, 1985). Faced with the choice between early retirement and continuing on the main employment at least to age 65, an individual is likely to compare how well off his household would be from early retirement versus retirement at age 65 or later. Out of all early retirement dates, she selects the one that provides the highest utility. In a similar manner, she selects one date from all possible none nearly dates. The individual's early retirement decision then reduces to a choice between retiring at the best early date and the best none early date. If the best early date has highest utility, the individual is an early retiree (Bazzoli, 1985). Thus if the individual facing the retirement decision consider her health status poor the perceived value of her job will diminish for her and the early retirement will gain stronger possibility. However in the developing countries people are facing a different situation. The life expectancy of an ordinary citizen in a

developing country in nearly 10 years lower than her counterpart in the developed countries (Ediev, 2010). The less available health care services and the lower life expectancy means that for a citizen of a developing country the health is more important in the retirement decision that a citizen in a developed country.

Some empirical studies on the relationship between health and early retirement decision suggest that the perceived health a year prior to retirement is showing no significant effect on the retirement decision (Bazzoli, 1985). Some other studies found a small effect of the perceived health a year prior to the retirement on the retirement decision (Burkhauser and Quinn, 1981). On the other hand the perceived health report immediately after the retirement shows a positive and strong effect on the retirement (Boskin and Hurd, 1978; Gordon and Blinder, 1980; Hanoch and Honig, 1983; Quinn, 1977; Reimers, 1977). An individual who reports limitation immediately after retirement is 14.8% more likely to retire early (Bazzoli, 1985). Although the empirical results gathered by these studies are often criticized to be not accurate due to biased reporting by the retired individuals but one study which took this problem under considerable attention concluded that: "Unlike most previous findings, the empirical results suggest that economic variables play a more important role than health in retirement decisions" (Bazzoli, 1985).

From the theoretical and empirical studies mentioned above we can develop our 4th hypothesis as:

H4a. Individuals who perceive themselves not healthy will retire earlier than others.

H4b. Individuals who perceive they have worse health situation than others will retire early.

Till now we only covered the personal and family factors affecting the retirement decision, but there is a vital question here. Does the work condition affect the retirement? Retirement in its origin means to stop working at where you are working so if the person in question is not satisfied with her working condition will it help in early retirement? The concept of job satisfaction is young and its implication on retirement behavior is even younger. Organizational policies have been of little support in encouraging employees to stay working beyond the traditional age of retirement. Drucker (2001) criticized human resource managers for not doing enough for supporting older workers and continuing to favor younger people. He further argued it was the responsibility of human resources managers to introduce new policies for encouraging older workers to remain with them past the traditional retirement age (Drucker 2001). Although the organizational policies is an important factor in job satisfaction of the employee but there are other factors as well. There is evidence that older workers want flexibility in their work arrangements if they are to continue working (Patrickson 2003; Phillipson 2004; Productivity

(Commission, 2005). Also some research suggests that some older workers especially those in professional jobs would be interested in working longer because they enjoy the job and stimulation provided by coworkers (Leonard 1999, p. 28). Hansson et al. (1997) suggested another reason for employees retire early was the psychological factors related to job satisfaction apart from financial and health factors. However, dissatisfied employees were looking and finding other ways of being rewarded, for example lifestyle choices and satisfaction outside the workplace (Driver 1985). Thus,

for many older workers, early retirement had become more attractive because the intrinsic factors that used to stimulate them had disappeared. Retirement is now viewed by many as a period of enjoyment and creative experience (Phillipson 2004).

This provides a theoretical foundation for supporting the role of job satisfaction on retirement decision. Also there are some newly conducted empirical researches on the possible effects of job satisfaction on retirement decision.

Sibbald, Bojke and Gravelle (2002) stated that although the proportion of doctors intending to quit direct patient care in the next five years rose from 14% in 1998 to 22% in 2001. Higher job satisfaction was associated with a reduced likelihood of quitting. There is also on study conducted in Finland that provides empirical evidence that job satisfaction has a significant effect on later retirement and continue to work for older employees (Kautonen, Hytti, Bögenhold and Heinonen, 2012).

From these arguments mentioned above we are able to develop our next hypothesis based on job satisfaction. Therefore we create a two part hypothesis one for covering the workplace policies embodied by the management and the next one for general satisfaction with the job.

H5a. Low job satisfaction results in early retirement.

H5b. Low satisfaction with one's supervisor results in earlier retirement.

As we mentioned before it is accepted that retirement is a family matter which effects the household of the retired individual (Szinovacz, Ekerdt, & Vinick, 1992) and since

retirement also means that the individual quits her current job one can easily assume that the relationship between family and work for an individual plays a role in her retirement decision. Relation between family and work can be divided into two opposite concepts. The positive relation which facilitate the work and improves the life and job satisfaction of an individual (Greenhaus and Powell, 2006) and the negative relation which reduces job performance due to the existing conflicts from the different roles family and work expect from an individual (Netemeyer, Boles and McMurrian, 1996). As the explanation suggests when the work and family are supporting each other, this relationship is called work to family affiliation and family to work affiliation highlighting which role is supporting the other role. Also when family and work roles are contradicting each other and preventing the individual from investing her full potential in each, this relationship is called work to family conflict and family to work conflict again highlighting the stream of negative effects.

From earlier researches we know that job satisfaction has a significant effect on the retirement decision (Patrickson and Clarke, 2001; Kooij, de Lange, Jansen and Dikkers, 2007). Also from researches already conducted in work and family relation, it was concluded that work to family relation plays a key role in defining one's job satisfaction whether it is playing a positive role or a negative role (Choi and Kim, 2012; Kossek and Ozeki, 1998; Friedman and Greenhaus, 2000; Barnett, 1998; Greenhaus and Parasuraman, 1999; Haas, 1999). Our main theoretical argument about the effect of work to family relationship on retirement decision is:

When 1 affecting 2 and 2 affecting 3 we can conclude that 1 affecting 3. Thus when home to family relationship affecting job satisfaction and job satisfaction also affecting retirement decision on can conclude that work to family relationship is affecting the

retirement decision. The other theory on this subject suggests that when an individual is suffering from conflict between her job and family role the retirement will act as a relief and thus she is more likely to retire early in order to gain that relief. On the other hand when an individual in enjoying family to work affiliation the retirement will act as a stressor for her thus she is more likely to avoid retirement and the early retirement will be unexpected (Hochschild, 1997; Coursolle, Sweeney, Raymo and Ho, 2010; Sweeney and Raymo, 2006).

About the empirical arguments about the role of work to family and family to work relationship on retirement decision two studies has been done recently. One study finds that Work to family conflict was positively related to preferences for both full and partial retirement. But work to family conflict did not appear to mediate relationships between stressful work and family environments and retirement preferences (Sweeney and Raymo, 2006). The other study which was conducted after the first one states that retirement is associated with relatively fewer depressive symptoms among individuals who reported high levels of work stress interfering with family life in late midlife. The study finds suggestive evidence of a similar association with respect to positive psychological functioning after accounting for unobserved characteristics of individuals. Among individuals reporting high levels of family stress spillover into work life at late midlife, results suggest that retirement tends to be associated with better emotional well-being especially among men (Coursolle, Sweeney, Raymo and Ho, 2010).

From the theoretical arguments and empirical findings mentioned above we can assume that a double hypothesis about the effects of work to family relationship on retirement can be mentioned:

H6a. Work to family conflict and family to work conflict will result in early retirement.

H6b. Work to family affiliation and family to work affiliation will postpone retirement.

Many factors and their effect on retirement have been studied before. Among them is age. Age itself is a very obvious factor in determining retirement. Although retirement is bounded with age in its meaning but the actual effects age has on retirement is a subject of study. Will the aging process of an individual shapes her approach towards retirement? If we assume that retirement and exiting the labor market is a direct consequence of not being motivated to work then there are some researches already covering this subject. Although these researches are few in numbers (Arvey and Warren, 1976; Heneman, 1973; Huddleston et al., 2002; Linz, 2004; Lord, 2004) but they provide evidence that age affect the relationship between various work characteristics and motivation to work. Warr (1997) stated that the limited empirical evidence on the motivational effects of key job features at different ages, and concluded: as an individual ages the importance attached to high job demands, variety and feedback is likely to decrease, while the importance of job security and physical security is likely to increase. Various other studies have found that, with older workers, job satisfaction is more closely related to intrinsic factors or internal rewards of work compared to younger employees (Cohn, 1979; Gruenfeld, 1962; Kanfer and Ackermann, 2004; Saleh and Otis, 1964; Schwab and Heneman, 1977; Stagner, 1985; Valentine et al., 1998; Vallerand et al., 1995). Also one study suggests that some older workers who were avoiding retirement, based on their good health, continued psychological commitment to work in fact (Parnes and Sommers, 1994). Apart from theoretical evidence on the effects of age on retirement there also some empirical evidence to back it up. In Australia, the Australian Bureau of Statistics (1998)

conducted a survey asking those aged 45 and over when they intended to retire from full-time work. Those who intended to retire aged 55-64 were 30 percent of the men and 44 percent of the women meaning an average of 37 percent of all those asked. Those intending to retire aged 65 and over were 34 percent of the men and 14 percent of the women meaning an average of 24 percent of all of them (Australian Bureau of Statistics 1998). This means that those who are motivated to continue to work after 65 years old are more than others but also this can mean that older people are more likely to avoid an early retirement and continue to work after 60 years old. Also another empirical study conducted in Australia found that age has a significant "moderating impact" on the way employees perceive four traditional retirement factors namely intrinsic, health, financial and organizational policies and practices (Shacklock and Brunetto, 2005).

Following all mentioned above we can develop a new hypothesis based on the way age affect the retirement behavior in an individual. Knowing that previous studies suggest older worker are more committed to continue working:

H7. Increasing age will also increase the perceived and actual retirement age.

The wealth effect theory in economy is commonly accepted. This theorem suggests that individuals tend to consume more goods and services and save less if their perceived wealth increases. Although many studies were conducted based on this theorem nearly all of them ignored the consumption of leisure (Coronado and Perozek, 2003). Many studies found that retirement for many people is considered a gift, something to be enjoyed and one article in particular mentioned that retirement is a luxury (McManus, Anderberg and Lazarus, 2007). If we accept that retirement can be

considered as leisure and leisure have a perceived value for and individual then according to the wealth effect theorem as the individual's perceived wealth increases the perceived value of leisure for her also increases and this means that individual is more likely to retire early. Also wealth act as a security for households, having a formidable capital makes people less caution in decision making and increases their ability for risk taking. If we accept that early retirement decision is a kind of risk taking of its own then we can assume that wealth increases the like hood of taking this decision. In other words one can assume that wealth act as a multiplier for all the other factors affecting the retirement decision. For example if an individual is suffering from a heart episode her wealth will have a direct effect on whether she decides to retire early or continue to work despite risks she is facing.

Empirical studies on this subject are "small but growing" (Coronado and Perozek, 2003). Earlier works focused mainly on inheritance and its effect on labor supply. For example, (Holtz-Eakin, Joulfaian and Rosen, 1993) found that large inheritances reduce the labor supply while Joulfaian and Wilhelm (1994) found only modest negative disincentive effects of inheritances on labor supply. One article even studied the effects of winning lottery on labor supply and retirement decision. Imbens, Rubin and Sacerdote (2001) found that winners of large lottery prizes significantly reduced both their labor force participation and hours worked. In other words they found that if you win the lottery and overnight become rich then tomorrow morning you are less likely to be eager to go to work and thus significantly more likely to retire early. More studies focused on the effects of stock exchange boom in the retirement and they too found that increasing perceived wealth directly effects the decision to retire early. Cheng and French (2000) estimated that the stock market run-up of the 1990s reduced the labor force participation of older men by between 1 and 3-1/4 percentage points,

on average, between 1995 and 1999. Sevak (2001) found that early retirement rates for workers with DC pension plans in the US rose relative to the early retirement rates of other workers, which remained stable between 1992 and 1998. Khitatrakun (2001) also found that respondents who held large amounts of stocks retired earlier than expected relative to other respondents. Studies on stock exchange boom in the 90's suggest that respondents who held corporate equity immediately prior to the bull market of the 1990s retired, on average, 7 months earlier than other respondents (Coronado and Perozek, 2003). Other studies found different results, Hurd and Reti (2001) found little effect of wealth on retirement decision for workers over 62 years old. Yet since the financial crisis is still a serious consideration and in 2013 the world economy is still recovering from it the importance of wealth on retirement gains attention. In the 90's studies were focused completely on the effects of increasing wealth on retirement while today they must be on the effects of decreasing wealth has on the retirement decisions.

Considering all of the arguments and empirical findings mentioned above our last hypothesis can be stated as:

H8a. Ownership of housing results in earlier retirement.

H8b. Ownership of private transportation results in earlier retirement.

H8c. Ownership of capital investment will result in earlier retirement.

Chapter 3

METHODS

3.1 Sample and Procedures

In this study we used a sample of 150 respondents above 50 years old. All of them were either retired recently within 5 years or still employed and those who were still employed were at a stage of considering retirement decision. Again remember that retirement in this study means stop working for pay. We recruited the help of one industrial engineer working in a house appliance factory in Tehran (Iran's capital which account for 45% of the country's GDP in 2012), one officially retired mechanical engineer working in service sector in Mashhad (the country's second largest city with a population of over 3 million), two master students in Tehran and one conscript soldier in Semnan. For every one of our team except the two master students we gave 15 questionnaires to them and asked them to conduct the survey in their respectable position. They were responsible for 45 questionnaires. Our two master students used Tehran-Karaj train as their area for conducting survey. This train is responsible for transportation of more than 300000 people every day and people of all income strata and social status use this train to move between the two major cities. 45minutes travel is an ideal opportunity to conduct any kind of survey. The remaining 105 questionnaires were filled in this train between 5 pm and 8 pm which is the time that working men and women mostly use the train. We were aware of the risks this survey creates for individual's privacy and because of that we did not asked them to give their names and did not look at them when they were filling the questionnaire so

they could easily fill the questions. For those of them who were unable to read the questionnaire or wanted help explaining it we filled the questionnaires for them. Also we asked them to fully complete the questionnaires and those questionnaires which were not completely answered were considered unacceptable and we had to ask other respondents. At the start of the questionnaire we mentioned that this is only for a master thesis and will not have any effect on their personal life or career. By implementing all these percussions we tried to minimize the risk of a biased response. Of the 150 individuals took part in the survey 30 percent were women and 70 percent men. This distribution of questionnaires were based on the data provided by the national civil service organization which stated that 30% of the retired citizens in the last Persian year (2012-2013) were female and we implemented this fact in our data gathering process to maximize accuracy.

3.2 Measures

There are 30 different items that we used to test our hypotheses. The gender, age, the number of financially dependent individuals, pension level, health status, wealth, job satisfaction and the work to family and family to work relationships were estimated by 29 items and the retirement age which is our dependent variable was asked by 1 direct question, Questions were first written in English and then they were translated into Farsi.

For measuring the gender we used a simple question asking the respondent what her gender is using a nominal measurement asking whether she is a man or a woman. It is very common to ask the respondent whether she is a male or a female but we tried to recognize the right of existence for the sexual minorities and thus we did not ask about their sex, instead we asked about their gender, the respondent will be answering a

question on whether she is a man or a woman. This measuring the gender is not common but since many developing countries including Iran does not legally recognize sexual minorities we decided to use this measurement.

For measuring the number of financially dependent individuals we developed an interval measurement which directly asking the respondents the exact number of the family members and other individuals which are financially dependent on them. In previous studies it was accepted that retirement is a family matter (Szinovacz, Ekerdt, and Vinick, 1992), but these researches were conducted in developed societies. Since our sample is in a developing country and in these countries due to the lack of support system for youth such as college loan providers and the high youth unemployment the burden of young children is on the shoulder of their parents which are on the verge of retirement. After having the number of financially dependent individuals for each respondents we developed a model to determine whether she belongs to a crowded household or not, if she has more than 3 financially dependents for her she was classified as a crowded household and if not she was classified as a non-crowded household.

In order to measure the pension level we used an ordinal measurement asking the range of their pension and their social security service, in this ordinal measurement we used the official data provided by the ministry of civil services about the range of pension paid in Iran and then we divided this range into 5 different sub ranges from 1 to 5 (Bartarinha new, 2013). covers the minimum pension and any amount less than the official minimum pension that some people receive as insurance and 5 covering maximum official pension and any amount that private sector may pay as pension to certain employees.

In order to measure health we used two questions. The first question asked the respondents about her perceived health in general, whether she considered herself a healthy person or not, and the second question asked her about her own perceived health in comparison to other people of her age. This method was used commonly for different purposes. It is commonly accepted that health encompasses not only the absence of disease but also a state of well-being and being able to function in changing circumstances. (Idler and Kasl, 1995; Shields and Shooshtari, 2001; Bowling, 2005) also many dedicated articles in the past argued that studying a person's self-perceived health can be even more reliable than a clinical study about that person's physical and mental health because it covers a wider ranges of health limitation. (Idler and Kasl, 1995; Shields and Shooshtari, 2001; Bowling, 2005; Smith and Frank, 2005; Benyamini, Leventhal and Leventhal, 2000). Although the self-perceived health can be very useful in health care and medical researches the other aspects of research including the retirement studies are prone to face a biased response to the point that many studies concluded that ((an individual maybe claiming poor health right after retirement in order to justify the reduced labor force involvement)) (Bazzoli, 1985). This is a threat that all of the retirement researches that studied the effects of self-perceived health on retirement faced and this study is no exception.

Our next topic in this study was the effects of wealth on retirement decision. Using previous researches on wealth assessment we developed a basic model. (Curtin, Juster and Morgan, 1989) We asked our respondents 3 questions about wealth. First about their accommodation, whether they own a house and paying mortgage or they are living in a rented place. Second we asked about their car, whether they own a car or not. Third we asked about their ownership of capital, one must remember that in a developing economy the capital market is also developing meaning that there is no

common stock exchange or pension funds system for everyone. In order to solve the absence of a developed financial system we only asked them how much capital in total they own and we explained to them that this capital can be any wealth generating platform whether an apartment they rented to someone or a factory they own. Since there is strong scientific evidence that argues the effect of having wealth in terms of capital on retirement decision this research considers the ownership of capital the most important factor in determining wealth effects on retirement (Cheng and French, 2000; Sevak, 2001; Khitatrakun, 2001; Coronado and Perozek, 2003).

For measuring job satisfaction we used two items derived from Hartline and Ferrell (1996), and Schriesheimand and Tsui (1980). The original method consisted of six items but for simplicity and since our questionnaire was very demanding we only used two of those items asking about satisfaction of their current or last job and their current or last boss. Vigoda (2000) who used the original scale reported the internal consistency of the reliability of job satisfaction was 0.77.

The last part of this study covered the work to family and family to work conflict and facilitation. For measuring family to work and work to family conflicts we used a ten item measurement derived from Boles et al. (2001). The internal consistency of the reliabilities of work to family conflict and family to work conflict reported in their study were 0.94 and 0.82, respectively. Also Jung and Kim (2012) reported that using the same measurement they attained a Cronbach's

Alpha of 0.9 and 0.86 respectively. For measuring work to family and family to work facilitation this study used an eight item model constructed by Grzywacz and Marks (2000). Aryee et al. (2005) who used this measurement scale reported that the internal

consistency of the reliabilities of work to family facilitation and family to work facilitation were 0.75 and 0.73, respectively. Also Jung and Kim (2012) reported a Cronbach's Alpha equal to 0.86 for both work to family and family to work facilitation.

This study will use the SPSS 21 to analyze the data gathered by the questionnaires and a copy of the original questionnaire both in English and Farsi is attached to this part.

We divided the data gathered to two groups, those who are already retired and those who are employed and will retire in future, doing so we aim to compare the responses between the two groups.

Chapter 4

RESULTS

4.1 Sample Characteristics

The demographic data showed that 82.9 of the respondents were men (126 people) and 17.1 percent of the respondents were women (26 people). 18.4 percent of the respondents were below 50 years old with the youngest of them 38 years old. 33.9 percent were between 50 years old and 60 years old and the remaining respondents were above 60 years old (46.7 percent). 46 respondents are still employed (30.3 percent) while 146 respondents are already retired and are not working (69.7 percent). All the data provided is divided into two groups: the working group who are not retired yet and estimate their retirement age and the retired group who are already retired and gave their actual retirement age.

4.2 Test Results for the Hypothesizes

Table 1. Independent Sample T-test for Working and Retired Group Retirement Age Based on Gender

	Gender				
	Women	Men	df	t	Sig. (2-tailed)
Working group estimated retirement age	52.85 (5.942)	58.58 (4.309)	45	3.638	.001
Retired group actual retirement age	52.85 (7.151)	53.57 (7.151)	105	.354	.724

Note. Standard Deviations appear in parentheses below means.

Table 1 provides descriptive statistics for men and women both in the working group and the retired group. The mean estimated retirement age for the working men is 58.58 while mean retirement age for working women is 52.85 and we can see that for working group there is a 6 year difference between the mean of retirement for men and women. In the retired group mean retirement age for men is 53.57 while for women it is 52.85 and we can see here that there is a very small difference among the mean retirement age of retired men and women. Also table 1 provides independent sample T-test between the two groups. We see that the t value for working group is 3.638 which is statistically significant at P=0.001. The retired group has a t-value equal to 0.354 which is not significant. (p=0.724)

Table 2. Independent Sample T-test for Working and Retired Group Retirement Age Based on Household Crowdedness

	household crowdedness				
	Crowded	Non	df	t	Sig.
Working group estimated retirement age	57.89 (6.623)	56.73 (5.173)	45	-.571	.571
Retired group actual retirement age	53.13 (6.469)	53.63 (7.069)	105	.338	.736

Note. Standard Deviations appear in parentheses below means.

Table 2 provides descriptive statistics for the household crowdedness of our respondents. Among the working group the mean estimated retirement age for those responsible for crowded households is 57.89 years while for those whose households are not crowded its 56.73. Among the already retired group the mean retirement age for those responsible for crowded households is 53.13 while those responsible for non-crowded households mean retirement age is 53.63. Also table 2 provides independent sample T-test for the two working and retired groups based on their respective household crowdedness. As we can see there is no statistically significance in either group.

Table 3. ANOVA for Working and Retired Group Retirement Age Based on Pension Level

	Pension level					F	Sig.
	1	2	3	4	5		
Working group retirement age	56.75 (5.230)	56.39 (6.766)	59.09 (3.885)	54.50 (5.260)	56.60 (3.130)	.668	.618
Retired group retirement age	55.24 (9.705)	53.02 (6.657)	51.90 (4.482)	60.50 (.707)	58.00 (4.000)	1.615	.176

Note. Standard Deviations appear in parentheses below means. 1: less than 500000 Rials, 2: 500000-1000000, 3: 1000000-1500000, 4: 1500000-2000000, 5: more than 2000000.

Table 3 provides descriptive statistics for the working group based on their estimated pension and the retired group based on their actual pension. The pension level is divided into 5 categories from 1 to 5. 1 is the lowest range meaning less than 5 million Iranian Rials. 5 is the highest range meaning more than 20 million Iranian Rials. In this table we can see the mean estimated retirement age for the working group and the mean retirement age for the retired group. Also table 3 shows the ANOVA test for pension level. In this table we can see that there is no statistically significance for either groups.

Table 4. ANOVA for Working and Retired Group Retirement Age Based on Self-Perceived Health

	Self-perceived health						
	1	2	3	4	5	F	Sig.
Working group estimated retirement age	58.85 (4.534)	54.61 (5.381)	55.75 (7.228)	59.25 (5.377)	none	2.456	.076
Retired group actual retirement age	53.19 (6.356)	51.93 (7.353)	53.96 (6.105)	55.16 (8.480)	54.14 (4.981)	.681	.607

Note. Standard Deviations appear in parentheses below means. 1: very bad, 2: bad, 3: normal, 4: good, 5: very good.

Table 4 provides descriptive statistics for the two groups based on their self-perceived health. Ranging from 1 to 5, 1 in the lowest meaning the respondent felt she has a very bad health while 5 is the highest meaning the respondent felt she has a very good health. We provide the mean estimated retirement age for the working group and the actual retirement age for the retired group respective to their self-perceived health. The interesting thing in this table is that not a single respondent in our working group believed to have a very good health. Also table 8 provides the ANOVA for the working and retired groups based on their self-perceived health. As we can see for the retired group there is no relationship between the retirement age and self-perceived health but for the first group the p value is much lower (p=0.076).

Table 5. ANOVA for Working and Retired Group Retirement Age Based on Self-Compared Health

	Self-compared health						
	1	2	3	4	5	F	Sig.
Working group estimated retirement age	54.33 (7.394)	54.90 (4.818)	58.38 (5.131)	56.75 (3.948)	none	1.613	.201
Retired group actual retirement age	53.75 (5.463)	52.48 (8.403)	54.10 (6.652)	53.23 (5.918)	52.50 (3.536)	.266	.899

Note. Standard Deviations appear in parentheses below means. 1: I am worse than them all, 2: I am worse than most of them, 3: I am normal, 4: I am healthier than most of them, 5: I am healthier than them all.

Table 5 provides the descriptive statistics for the working group estimated retirement age and the retired group actual retirement age based on their self-compared health to other people of their age. The self-compared health is ranged from 1 to 5. 1 is the lowest meaning fare worse and 5 is the highest meaning far better. Also here we can see that not a single respondent in the working group believed that her health is far better that other people of her age. Also table 5 shows the ANOVA for the two groups based on their respective self-compared health. We can see no significance for either group in this table. The *p* value for both groups are high.

Table 6. ANOVA for Working and Retired Group Retirement Age Based on Ownership of Housing

	ownership of housing						
	1	2	3	4	5	F	Sig.
Working group estimated retirement age	59.80 (6.496)	58.47 (5.513)	55.93 (3.615)	55.00 (7.071)	51.50 (2.121)	1.628	.186
Retired group actual retirement age	53.33 (8.426)	53.66 (6.983)	54.65 (4.401)	52.30 (3.020)	44.00 (22.62)	1.168	.329

Note. Standard Deviations appear in parentheses below means. 1: I live with relatives, 2: I rented my house, 3: I own my own house and I am paying mortgage, 4: I own my own house, 5: I own multiple houses.

Table 6 provides descriptive statistics for the working group estimated retirement age and the retired group actual retirement age based on their owner ship of housing. Ranging from 1 to 5, 1 is the lowest meaning that the respondent is living with friends or relatives for free and 5 is the highest meaning that the respondent owns multiple houses. Also table 6 shows the ANOVA for the two groups based on their ownership of housing. Using ANOVA we can see no significant relation between the ownership of housing and the retirement age in either group.

Table 7. ANOVA for Working and Retired Group Retirement Age Based on Ownership of Car

	ownership of car					
	1	2	3	4	F	Sig.
Working group estimated retirement age	52.00 (none)	56.57 (6.584)	56.00 (3.786)	58.33 (3.976)	.699	.558
Retired group actual retirement age	51.50 (6.317)	51.86 (7.379)	56.14 (5.178)	54.43 (6.630)	1.579	.199

Note. Standard Deviations appear in parentheses below means. 1: no, 2: we have one car and we are paying our debts for it, 3: we have one car, 4: more than one car.

Table 7 provides descriptive statistics for the working group estimated retirement age and the retired group actual retirement age based on their respective ownership of car. Ranging from 1 to 4, 1 is the lowest meaning that the respondent has no car at all while 4 is the highest meaning that the respondent has more than one car. Also table 7 shows the ANOVA for two groups based on their ownership of car. As we can see there is no significant relation between the ownership of car and retirement age in either group.

Table 8. ANOVA for Working and Retired Group Retirement Age Based on Ownership of Capital

	Ownership of capital						
	1	2	3	4	5	F	Sig.
Working group estimated retirement age	65.00 (7.071)	59.44 (2.833)	56.00 (5.858)	56.07 (4.763)	50.00 (none)	2.538	.054
Retired group actual retirement age	none	52.31 (5.662)	54.13 (6.818)	50.86 (11.07)	55.00 (7.071)	.830	.480

Note. Standard Deviations appear in parentheses below means. 1: I need financial support from relatives, 2: I live on my salary and I have lots of debts, 3: I have no investment and I live on my salary, 4: I have little investment, 5: I have vast investments and they pay good.

Table 8 provides descriptive statistics for the working group estimated retirement age and the retired group actual retirement age based on their ownership of capital. The ownership of capital has 5 levels. 1 is the lowest means that the respondent regularly needs financial support from others while 5 is the highest meaning the respondent has vast investments. As you can see here the mean estimated retirement age for the working group decreases as the level of capital ownership increases. Also table 8 shows the ANOVA for the working and retired groups based on their ownership of capital. The working group estimated retirement age is related to the ownership of capital with P= 0.054 while the retired group retirement age is not related to the ownership of capital (p=0.480).

Table 9. ANOVA for Working and Retired Group Retirement Age Based on Job Satisfaction

	Job satisfaction						
	1	2	3	4	5	F	Sig.
Working group estimated retirement age	58.43 (2.936)	58.25 (2.363)	57.40 (5.948)	53.57 (4.791)	57.17 (6.392)	.881	.483
Retired group actual retirement age	49.80 (10.42)	52.33 (6.022)	53.70 (6.477)	55.55 (5.373)	53.77 (6.595)	1.039	.391

Note. Standard Deviations appear in parentheses below means. 1:NO. 2, 3 and 4: somehow, 5: Yes.

Table 9 provides descriptive statistics for the working group estimated retirement age and the retired group actual retirement age based on their job satisfaction. Ranging from 1 to 5, 1 is lowest meaning that the respondent is not satisfied with her last or current job while 5 is the highest meaning that the respondent is satisfied with her last or current job. Also table 18 shows the ANOVA for the two groups retirement age based on their last or current job satisfaction. We can see no significant relation in either group.

Table 10. ANOVA for Working and Retired Group Retirement Age Based on Supervisor Satisfaction

	Supervisor satisfaction						
	1	2	3	4	5	F	Sig.
Working group estimated retirement age	53.88 (6.151)	58.00 (none)	59.16 (4.549)	55.60 (7.635)	56.08 (4.699)	1.701	.168
Retired group actual retirement age	50.75 (7.508)	54.67 (6.429)	55.04 (6.619)	54.10 (8.048)	53.78 (6.235)	1.388	.243

Note. Standard Deviations appear in parentheses below means. 1:NO. 2, 3 and 4: somehow, 5: Yes.

Table 10 provides descriptive statistics for the working group estimated retirement age and the retired group actual retirement age based on their supervisor satisfaction. Ranging from 1 to 5, 1 is lowest meaning that the respondent is not satisfied with her last or current supervisor while 5 is the highest meaning that the respondent was satisfied with her last or current supervisor. Also table 20 shows the ANOVA for the two groups retirement age based on their last or current supervisor satisfaction. We can see no significant relation in either group.

Now we are going to study the effects of work-family and family-work conflicts and facilitations on the retirement age. Each of our items ranged from 1 to 5, 1 is the lowest

meaning NO and 5 is the highest meaning YES. Note that the original model consisted of seven scales but we used 5 scales for simplicity.

Table 11. Cronbach's Alpha for Work-Family Relations

	Cronbach's Alpha			
	WFC	FWC	WFF	FWF
Working group	.797	.841	.794	.734
Retired group	.855	.695	.454	.497

WFC: work-family conflict, FWC: family-work conflict, WFF: work-family facilitation, FWF: family-work facilitation.

Our model consisted of 5 items for work to family conflict (WFC), using this model we achieved a Cronbach's alpha equal to 0.797 for the working group and 0.855 for the retired group as shown in table 11. For family to work conflict (FWC) we used a 5 item model and achieved a Cronbach's alpha equal to 0.841 for the working group and 0.695 for the retired group. For work to family facilitation we used a 4 item model and achieved a Cronbach's alpha equal to 0.794 for the working group and 0.454 for the retired group as shown in table 11. Since the alpha for the WFF in the retired group is less than 0.5 then this data is not acceptable. For family to work facilitation we used a 4 item model and achieved a Cronbach's alpha equal to 0.734 for the working group and 0.497 for the retired group. Since the alpha for the FWF in the retired group is less than 0.5 then this data is not acceptable.

We added the respective values for each item in the model and reached 4 ordinal variables ranging from 1 to 20. The 4 variables are: WFC, FWC, WFF and FWF.

Table 12 shows the correlation for all of our variables in working group. It contains mean, standard deviation. Take note that pension, health1, health 2, house, car, capital, JS and BS are ranged from 1 to 5. WFC, FWC, WFF and FWF are ranged from 1 to 20. The retirement age is our dependent variable.

Table 12 shows that gender, ownership of housing and ownership of capital are negatively correlated to estimated retirement age among the working group which are not retired yet. Also age is positively correlated to retirement age among this group.

Table 12 also has some other interesting findings. Ownership of capital and ownership of housing are correlated and ownership of housing is correlated to ownership of private transportation. Job satisfaction and self-perceived health are negatively correlated to each other. Expected pension level and job satisfaction are also correlated. Family to work conflict and job satisfaction are negatively correlated. Supervisor satisfaction and job satisfaction are correlated to each other. Supervisor satisfaction is also negatively correlated to both family to work and work to family conflicts. Family to work conflict and work to family conflict are correlated. Also family to work facilitation and work to family facilitation are correlated.

Table 12. Correlation Table for the Working Group

Variables for working group	M	SD	1.retirage	2.gender	3.age	4.pension	5.crowd	6.health1	7.health2	8.house	9.car	10.capital	11.JS	12.BS	13.WFC	14.FWC	15.WFF
1.retire age	56.96	5.424															
2.gender	1.28	.455	-.481**														
3.age	50.02	5.717	.638**	-.199													
4.pension	2.57	1.205	.000	-.257	-.131												
5.crowd	.1957	.4010	.086	-.066	.056	-.096											
6.health1	1.83	.926	-.108	.119	.013	.030	-.265										
7.health2	2.61	.829	.253	-.289	.044	.026	-.099	.112									
8.house	2.65	1.016	-.362*	.025	-.205	-.144	.062	.029	.019								
9.car	2.78	.941	.172	-.009	.199	-.124	.174	.007	.059	.291*							
10.capital	3.07	.879	-.377**	.175	-.075	.027	-.163	.014	.066	.399**	.152						
11.JS	3.54	1.471	-.117	.197	-.075	.374*	.117	-.304*	-.077	-.183	-.170	-.183					
12.BS	3.30	1.380	.055	.178	.067	.175	-.230	.008	.068	-.113	-.102	-.218	.497**				
13.WFC	12.34	5.449	-.018	.121	.153	-.024	.039	.197	-.053	.131	.136	.148	-.240	-.304*			
14.FWC	10.956	5.947	.247	-.110	.479**	-.251	.041	.039	.132	.027	.225	.200	-.452**	-.491**	.639**		
15.WFF	14.06	4.572	.228	-.052	.084	.142	-.068	-.113	.224	-.220	.107	-.084	.143	.014	.289	.217	
16.FWF	16.30	4.043	.038	-.217	-.027	.251	-.079	-.128	.288	-.022	-.011	.044	.087	-.172	.272	.173	.640**

NOTES: **. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed). Gender (1 means man, 2 means woman), Crowded: whether the household is crowded or not (0 means no, 1 means yes), Health1: self-perceived health, health2: self-compared health, JS: self-reported job satisfaction, BS: self-reported supervisor satisfaction, WFC: work to family conflict, FWC: family to work conflict, WFF: work to family facilitation, FWF: family to work facilitation.

Table 13. Correlation Table for the Retired Group

Variables for retired group	M	SD	1.retirage	2.gender	3.age	4.pension	5.crowd	6.health1	7.health2	8.house	9.car	10.capital	11.JS	12.BS	13.WFC	14.FWC	15.WFF
1.retire age	53.48	6.872															
2.gender	1.12	.330	-.035														
3.age	64.30	8.863	.544**	-.173													
4.pension	2.19	.863	.031	-.015	-.097												
5.crowd	.2925	.4570	-.033	-.240*	-.118	.052											
6.health 1	2.57	1.227	.111	-.150	.280**	-.228*	.076										
7.health 2	2.66	.904	.023	-.019	.034	-.051	.081	.527**									
8.house	2.32	.834	-.099	.098	-.112	-.045	.151	.016	.057								
9.car	3.09	1.091	.188	-.085	.234*	-.242*	-.056	.301**	.313**	.134							
10.capital	2.86	.608	.041	.040	.013	-.057	.047	.121	.223*	.297**	.149						
11.JS	3.92	1.353	.139	-.105	.199*	.087	.025	.006	-.172	-.102	-.098	-.211*					
12.BS	3.39	1.565	.140	-.130	.218*	-.047	.013	.029	-.216*	-.052	-.044	-.012	.605**				
13.WFC	11.85	6.374	-.085	.013	-.072	.045	-.005	-.075	.066	.143	.029	-.118	-.112	-.130			
14.FWC	9.990	4.909	.033	.024	-.012	-.036	.031	.006	-.014	.008	.073	-.109	-.228*	-.063	.349**		
15.WFF	14.05	3.999	.035	-.056	.075	.099	.001	-.175	-.118	.069	-.193*	-.098	.066	.132	.072	.159	
16.FWF	16.04	3.602	-.104	-.093	-.128	-.159	.049	.031	.025	.030	-.067	.068	.206*	.051	-.056	-.129	.283**

NOTES: **. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed). Gender (1 means man, 2 means woman), Crowded: whether the household is crowded or not (0 means no, 1 means yes), Health1: self-perceived health, health2: self-compared health, JS: self-reported job satisfaction, BS: self-reported supervisor satisfaction, WFC: work to family conflict, FWC: family to work conflict, WFF: work to family facilitation, FWF: family to work facilitation.

Table 13 provides the correlations among the variables in the retired group. This group is consisted of the people who are already retired and thus their retirement age is actual not self-estimation. It also provides mean and standard deviations for all variables in the retired group.

For our dependent variable which is the retirement age we can see that only age is correlated to it. Between retirement age and other variables there is no significant correlations.

Table 13 also shows us some other interesting correlations. Age is correlated to self-perceived health, job satisfaction and supervisor satisfaction. Pension is correlated to self-perceived health. Ownership of capital is correlated to self-compared health, negatively correlated to last job satisfaction. Self-compared health is negatively correlated to last supervisor satisfaction. Last job satisfaction is correlated to last supervisor satisfaction, negatively correlated to family to work conflict and correlated to family to work facilitation. Family to work conflict is correlated to work to family conflict and family to work facilitation is correlated to work to family facilitation. Ownership of car is correlated to age, self-perceived health and self-compared health.

Table 14 shows the model summary for testing the retirement age among the working group and retired group separately using the linear regression.

Table 14. Gender (1 means man, 2 means woman), Crowded: whether the household is crowded or not (0 means no, 1 means yes), Health1: self-perceived health, health2: self-compared health, JS: self-reported job satisfaction, BS: self-reported supervisor satisfaction, WFC: work to family conflict, FWC: family to work conflict, WFF: work to family facilitation, FWF: family to work facilitation.

Table 14. Model summary for Regression Analysis

	R	R Square	Adjusted R Square	`Std. Error of the Estimate
Working	.858[a]	.736	.591	3.469
Retired	.657[b]	.432	.330	5.625

a. Predictors: (Constant), Crowded, wfc, pension, health2, house, age, health1, car, BS, capital, wff, gender, fwf, JS, fwc

b. Predictors: (Constant), Crowded, wff, JS, wfc, pension, health2, house, gender, age, fwc, capital, BS, fwf, car, health1

Using linear regression we find that age, ownership of capital and self-compared health have a significant relation with the estimated retirement age among the working group. The results are shown in Table 15 in the next page.

While age has a positive relation, ownership of capital has a negative relation and lowers the estimated retirement age. Also self-compared health increases the estimated retirement age.

In table 16 we can see that among the retired group only age seems to be significantly related to the retirement age.

Table 15. Linear Regression for the Working Group

	B	SE(B)	beta	t	Sig.
1.constant	41.784	7.433		5.622	.000
2.gender	-2.734	1.611	-.229	-1.697	.100
3.age	.533	.130	.562	4.112	.000
4.pension	.318	.582	.071	.546	.589
5.crowd	-.171	1.544	-.013	-.111	.912
6.health1	-1.085	.690	-.185	-1.573	.126
7.health2	1.437	.758	.220	1.895	.068
8.house	-.918	.657	-.172	-1.398	.172
9.car	.675	.629	.117	1.073	.292
10.capital	-1.570	.745	-.255	-2.108	.044
11.JS	-.788	.544	-.214	-1.448	.158
12.BS	-.125	.585	-.032	-.214	.832
13.WFC	.075	.152	.075	.492	.626
14.FWC	-.173	.178	-.190	-.972	.339
15.WFF	.220	.167	.186	1.319	.197
16.FWF	-.250	.194	-.187	-1.293	.206

Gender (1 means man, 2 means woman), Crowded: whether the household is crowded or not (0 means no, 1 means yes), Health1: self-perceived health, health2: self-compared health, JS: self-reported job satisfaction, BS: self-reported supervisor satisfaction, WFC: work to family conflict, FWC: family to work conflict, WFF: work to family facilitation, FWF: family to work facilitation.

Table 16. Linear Regression for the Retired Group

variables	B	SE(B)	beta	t	Sig.
1.constant	19.725	8.022		2.459	.016
2.gender	1.746	1.953	.084	.894	.374
3.age	.416	.079	.537	5.286	.000
4.pension	.741	.759	.093	.977	.331
5.crowd	.904	1.394	.060	.649	.518
6.health1	-.338	.637	-.060	-.531	.596
7.health2	.089	.853	.012	.104	.918
8.house	-.560	.794	-.068	-.705	.482
9.car	.713	.631	.113	1.130	.261
10.capital	.630	1.128	.056	.558	.578
11.JS	.295	.631	.058	.467	.641
12.BS	.022	.514	.005	.043	.966
13.WFC	-.068	.103	-.063	-.654	.515
14.FWC	.099	.138	.071	.715	.476
15.WFF	.010	.173	.006	.058	.954
16.FWF	-.031	.193	-.016	-.161	.872

Gender (1 means man, 2 means woman), Crowded: whether the household is crowded or not (0 means no, 1 means yes), Health1: self-perceived health, health2: self-

compared health, JS: self-reported job satisfaction, BS: self-reported supervisor satisfaction, WFC: work to family conflict, FWC: family to work conflict, WFF: work to family facilitation, FWF: family to work facilitation.

The final results for our hypothesizes are shown in Table 17 for the working group and Table 18 for the retired group.

Table 17. Hypothesis Test Results for the Working Group

Hypothesis	accepted/rejected	test(s) if accepted
Age. & Retirement age +	accepted	regression, correlation
Gender. & Retirement age -	accepted	independent sample T-test, correlation
Crowded household. Retirement age +	rejected	
Pension. Retirement age -	rejected	
Self-perceived health. Retirement age +	accepted	ANOVA
Self-compared health. Retirement age +	accepted	regression
Ownership of housing. Retirement age -	accepted	correlation
Ownership of car. Retirement age -	rejected	
Ownership of capital. Retirement age -	accepted	ANOVA, correlation, regression
Job satisfaction. Retirement age +	rejected	
Supervisor satisfaction. Retirement age +	rejected	
WFC. Retirement age -	rejected	
FWC. Retirement age -	rejected	
WFF. Retirement age +	rejected	
FWF. Retirement age +	rejected	

Table 18. Hypothesis Test Results for the Retired Group

Hypothesis	accepted/rejected	test(s) if accepted
Age. Retirement age +	accepted	regression, correlation
Gender. Retirement age -	rejected	
Crowded household. Retirement age +	rejected	
Pension. Retirement age -	rejected	
Self-perceived health. Retirement age +	rejected	
Self-compared health. Retirement age +	rejected	
Ownership of housing. Retirement age -	rejected	
Ownership of car. Retirement age -	rejected	
Ownership of capital. Retirement age -	rejected	
Job satisfaction. Retirement age +	rejected	
Supervisor satisfaction. Retirement age +	rejected	
WFC. Retirement age -	rejected	
FWC. Retirement age -	rejected	
WFF. Retirement age +	rejected	
FWF. Retirement age +	rejected	

Chapter 5

DISCUSSION

Feldman (1994) stated that the number of workers retiring each year and workers retiring before 65 years are both increasing each year. This study also supports this finding. the most important findings of this study argues that increasing age directly increases both the actual retirement age and the perceived estimated retirement age. Some studies found that this is possibly due to psychological commitment to work felt by older workers which report good health as a major cause for avoiding retirement (Parnes and Sommers, 1994). This positive relation between age and retirement age is accepted commonly by researches in the developed countries and now this study can conclude that in both the retired and working groups studied the age played an important role in their retirement decision and overall younger people are willing to retire sooner. Apart from psychological commitment mentioned above this study points to the possibility of inaccuracy. Most of the younger respondents who participated in our study were not retired yet and gave an estimation for their retirement age. This can be inaccurate since they are not confronted by the decision and changes that it brings for their personal and family life. Other findings suggest that the importance of the age in retirement is that age changes other factors importance in the retirement decision. Patrickson and Ranzijn (2004) argued that workers approaching retirement have 'bounded choices' about retirement, each must consider their financial position, health situation, and motivation to work. Apart from this possibilities it is

supported by the findings of this study that in general new generations tend to retire much earlier than their predecessors.

We advise policy makers to start reforming the public pension system in order to avoid the current burden of social security that developed countries are facing or at least contain it since generation after generation there will be less tax payers with more pensioners because of earlier retirement and higher life expectancy.

For most firms the general tendency towards earlier retirement can be considered a good news because older workers have higher wages on average and they are also linked to substantial non-wage costs like pension premiums and health insurance that on average are higher than those for younger workers (Hallberg, 2011). On the other hand those firms which are incurring high costs for training their employers and firms which rely on their human capital and the experience of their employees such as research and development oriented firms might want to brace themselves for this change in retirement behavior. There is strong scientific evidence suggesting that continuing to work instead of retiring early can be considered a win-win situation both for the employees and their employer (McManus, Anderberg and Lazarus, 2007). Employees can benefit from not retiring not only because of financial awards it brings but also by avoiding the risk of social isolation. The risk of social isolation is comparable to that associated with cigarette smoking to one's health (House, 2001).

Gender also plays a role in retirement decision. Although we expected the role of gender to be much more significant this study found that gender plays a small but significant role in estimated retirement age among our working sample. On average

women expect to retire earlier than men. Although this study could not find any significant relation between gender and actual retirement age among women.

In Iran like many other developing countries there is a problem of high youth unemployment. This finding combined with the 50% larger unemployment for Iranian women in comparison to Iranian men. According to the World Bank the state reported youth unemployment in Iran is 23%. While 52% of the youth females with university education are currently unemployed (Trading economies, 2013). This provides a great opportunity for policy makers. Increasing efforts to fight gender discrimination at work by the government can not only decrease the unemployment rate for women but also since they retire sooner this will contribute to further reduction in unemployment in the long run although smaller than expected.

Many firms which do not want to incur the higher costs of retaining older employees also can focus more on recruiting women. Focusing on recruiting women can be considered a priority for larger firms since non-wage costs are 1% more for them comparing to smaller firms. (Hallberg, 2011). On the other hand those firms which lose from their experienced employee's retirement are advised to think twice before hiring women.

Self-perceived health and self-compared health to other people of the same age are also significantly related to the employee's estimated retirement age. Although this study found no relation between actual retirement age and health. Some previous studies found that employees who retire early will report poor health as a major cause for their decision (Bazzoli, 1985). This argument cannot be supported by the findings of our study because our retired sample show no relation between their retirement age and

their health status in time of retirement. Also in our conceptual development we argued that due to less developed health care service and lower life expectancy health may play a bigger role in retirement decision. This assumption is also rejected since according to our findings other determinants namely age, gender and wealth play a more important role. Economist Intelligence Unit provides data showing that in 2008 health care budget in Iran made up for 4.2% of the GDP. Although the government can't do anything of notice to affect the retirement decision firm which are interested in retaining their older employees can provide them with better health care insurance and also they must bear in mind that self-perceived health is not only a physical concept instead it is more due to mental situation and the feeling of being healthy. In other words being healthy is not only about absence of disease but also it is about a situation of well-being (Idler and Kasl, 1995; Shields and Shooshtari, 2001; Bowling, 2005). Also the self-perceived heath is more general than a clinical study and deals with a larger range of physical and mental issues (Idler and Kasl, 1995; Shields and Shooshtari, 2001; Bowling, 2005; Smith and Frank, 2005; Benyamini, Leventhal and Leventhal, 2000). This means that firms who are interested in retaining their older employees can focus on some non-financial rewards in order to make their employees happier and thus make them feel healthier. Gatherings, events and sports are advised to make employees feel happy and healthy.

Apart from age a very important finding of our study is the effect of wealth on perceived retirement age among employees who are approaching retirement age. We found significant relation between accommodation ownership and perceived retirement age. Also we found strongly significant relation between perceived retirement age and ownership of capital. The findings of our study is supported by a huge body of researches and studies conducted in the developed countries. One study points to the fact that many see retirement as a consumption of leasuire (Coronado and Perozek, 2003). Many studies found that retirement for many people is considered a gift, something to be enjoyed and

one article in particular mentioned that retirement is a luxury (McManus, Anderberg and Lazarus, 2007). The financial markets in Iran are not developed and there is almost no pension fund system established. Also as mentioned above Iran is suffering from high youth employment so persuading older workers to retire early is considered a priority for the policy makers. Our study found that ownership of housing directly affects employee's intention of early retirement age. Therefore policy makers are advised to make investments in housing for households. This will not only create jobs immediately and improves the living conditions in the country but also increases the possibility of early retirement among citizens approaching retirement age. Those firms who want to rid themselves of high non-wage costs and also higher average salary for older employees can also invest in housing for their employees. This kind of investment is especially more interesting for larger firms since not only they have the resources but also they incur non-wage costs for older employees 1% more than smaller firms. Since this study found no relation between pension and perceived or actual retirement age resources can be moved from paying pension on monthly basis to investments for housing. This can be a proper decision for a capital scarce country suffering from high unemployment and unhealthy housing situation.

Khitatrakun (2001) found that respondents who held large amounts of stocks retired earlier than expected relative to other respondents. Also in another study respondents who held corporate equity immediately prior to the bull market of the 1990s retired, on average, 7 months earlier than others (Coronado and Perozek, 2003). We mentioned before that financial markets in Iran and other developing countries are not yet developed. While many think that pension funds are a small part of capital market comparing to huge stocks owned by both private and organizational players we found a very interesting fact. Economist (2008) reports that according to an estimation by Morgan Stanly pension funds hold over US$20 trillion in assets worldwide. This huge amount of investment surpasses any other investor such as mutual funds, insurance companies, government currency

reserves and others. Iran and many other developing countries are suffering from a lack of pension funds in their financial structure. It is strongly advised that policy makers take immediate steps to create such firms and redirect resources from monthly pension paid to investment in pension funds. Another reason for supporting this argument is that we found no relation between expected pension paid to retirees and their estimated or actual retirement age. redirecting capital to pension funds not only results in a sense of wealth for their owners and thus earlier retirement but also create jobs for young work force and contribute to the country's GDP by stimulating both supply(investment) and demand(wealth effect). A very successful example already implemented in a country with similar situation to Iran is The Government Pension Fund of Norway involved in oil industry (Norges bank investment manager, 2013). This firm is so hugely successful that is considered the second largest pension funds in the world after Government Pension Investment Fund of Japan (Government pension investment fund of japan, 2013) Iran is also a major oil producer and creating a pension fund like this one can contribute to the country's GDP by increasing oil production and at the same time provides the retiree with steady income generated by its profits.

Firms on the other hand are advised to issue stocks for their employees as pension. By giving their employees shares of the company the management can achieve several aim at once. Not only they evolve the employee from mere worker to partner and tie them in the company's success but also they can bring much needed capital and increase their production. Of course this option is best suited for young and profitable firms with a future. There is a risk that doing so by large mature firms will result in empire building and lowering the profitability. Also firm which lose from their employees early retirement are advised to think twice before hiring wealthier employees with less financial restrains.

This study found no significant relation between household size for the individual and her retirement age. Also this study did not find any significant relation between job satisfaction and retirement decision. The reason behind this is maybe the importance of financial situation and after that health limitation and the collectivist culture of Iran. Studying work-family relations although this study found strong relation between work-family conflicts and job satisfaction but we could not find any meaningful relation between work-family conflicts and retirement age neither in employees expected retirement age nor already retired individuals actual retirement age. Apart from retirement decision and factors affecting it there are some other interesting finding that we showed in our results.

Chapter 6

LIMITATIONS AND FURTHER RECOMMENDATIONS

The limitations this study faced were mainly due to ignoring the difference between those who are recently retired and those who were retired long ago. Also people with different education, occupation and social statues may have some factors more influencing than the others. For example some studies only focus on doctors or teachers or hotel industry employees, but we failed to merit that fact. Lack of previous research in this field for other developing countries also proved to be a major obstacle. The team helped in conducting the survey were also not properly trained for working with the old people. Dealing with people already retired and extracting information from them proved to be the most difficult challenge for us. The possible inaccuracy of our data can be due to the old respondents inability to recollect their situation at the time of retirement, or confusing their current situation with their situation at that time. Also many respondents may failed to understand the questions we asked them and thus gave inaccurate answers. Lack of resources was also another challenge. All of our team conducting the research were volunteers, friends of the writer and they were mainly focused on one geographic area. Also our sample was predominantly answered by men. Only 20% of all respondents were women. In conducting research on job satisfaction we failed to complete the original model because our questionnaires were too heavy and respondents refused to answer any larger questionnaire. Also only 46 respondents were not retired yet and this decrease the creditability of our findings.

For further research this study laid the foundations for other studies. Although in developed countries many studies were conducted about retirement behavior and its determinants but in developing countries including Iran this is one of the first studies conducted. We hope to attract attention towards this very important issue that plays an important role in our economic and social life. Further research can be focused on employees approaching retirement age or individuals retired recently for example in the past 12 months. For further studies we suggest to focus on a single occupation, doing this we could gather accurate data for their respective firms and help those firm increasing their productivity. Also by merging the findings of these researches we can conclude the retirement behavior of a typical citizen more accurately. This can help governments plan their social security more efficient.

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