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## **Leadership style – The X Generation and Baby Boomers compared in different cultural contexts**

**Key words:** Leadership style, work characteristics, Xers and Baby Boomers, Taiwan.

### **Abstract**

Western researchers have concluded that generational groups of workers have different work characteristics and prefer different leadership styles. The objective of this study was to investigate if western research applies equally to generational groups in Taiwan's workplaces, specifically in the higher education sector and manufacturing industry. The research found that generational groups in the manufacturing industry have different work characteristics and require different leadership styles while there were no differences in work characteristics and preferred leadership style for generational groups in the education sector.

### **Introduction**

Today's workforce can be divided into three distinct groups of people. There are the Baby Boomers, X Generation (Xers) and Y Generation (Dot com generation). Baby Boomers are people born between the years of 1945-1964, a cohort that has been the source of many important cultural and economic changes. Generally, it is accepted that the Xers are people who were born between 1965 and 1980. Some researchers refer to them as 'baby busters', due to the drop-off or 'bust' in births following the Baby Boomer generation after World War II. The Y Generation or the 'dot com' generation are people who are born after 1980 (Solomon, 1992). This group of workers are only just entering the workplace and therefore their influence at this time is still emerging. Modern workplaces are typically diverse with all three generational groups represented.

The work characteristics of these generational groups are an important issue for their leaders. It is known that employees with different work characteristics will be more effective and productive with different leadership styles (Tulgan, 1996). The investigation of work characteristics and the corollary leadership style is therefore an

important area for research for leaders who must lead and motivate the generational groups and for researchers investigating differences between the generational groups. As workplaces are mainly comprised of Baby Boomers and Xers, this paper will focus attention of these two generational groupings.

### **Work characteristic differences between Xers and Baby Boomers**

The work characteristics of Baby Boomers and Xers are different in many respects, and this difference can be explained by many factors such as the differences in living environments when the values of these generations were formed. For the purposes of this research, work characteristics include variables that are frequently regarded in the literature as significant in modern workplaces. This includes work values, work attitudes and work expectations of employees.

One significant difference between individuals aged in their 20s and individuals in their 40s is their value system (Stauffer, 1997). Xers tend to be more independent, self-motivated and self-sufficient. Baby Boomers on the other hand, tend to be more diligent on the job and prefer a more stable working environment (Loomis, 2000).

The most consistent finding in the literature when comparisons of work characteristics are made between Xers and Baby Boomers is that each generational group exhibits a different mixture of lifestyle values and work ethics. The Baby Boomers tend to work hard and are generally loyal to their employer. Baby Boomers are willing and expecting to work with others. In terms of leadership style, Baby Boomers accept the chain of command. In addition, they expect their managers to give direction and to lead them towards organisational goals. Baby Boomers are however, not highly technologically savvy, nor do they generally like change (Raths, 1999).

In contrast, work values for the Xers emphasise personal satisfaction rather than just working hard. While Baby Boomers need to be encouraged to take advantage of training opportunities, the Xers tend to look for any opportunities to improve their working skills. They are loyal to their profession rather than to their employer. They are more individualistic. They have a high need for autonomy and flexibility in their

lifestyles and jobs thus less need for leadership. Additionally, Xers are technically savvy and are eager to update knowledge and application into their work. This technological capability is due to the fact that Xers grew up with rapidly changing technology and the availability of massive amounts of information (Keaveney, 1997).

Beside their work values, Shu (1998) indicates that Xers have broken the traditional Maslow hierarchy needs rule and challenged individual development progress schemes. Baby Boomers have tended to follow their individual development progress scheme starting from education, career, marriage, promotion and this has moved them towards self-achievement. Xers squeeze the process together. They need self achievement from their job and basic needs at the same time and they do not want their work to impact negatively on their quality of life. As a result, they are less devoted to their jobs, and less job involvement occurs.

In fact, job satisfaction is more important than promotion for the Xer. This is because Xers focus on life outside the job, their leisure, family, lifestyle and other interests are as important as their work. Xers can accept an unwanted or less desirable promotion if this suits their lifestyle. However they are not willing to make the sacrifices demanded by their organisations and turn into 'workaholics'.

In terms of money and recognition, western researchers have indicated that money and recognition are strong enticements for Baby Boomers while Xers do not want recognition for some of their efforts (Niemic, 2000). However, Levin (2001) argues that Xers do care about pats on the back and they do things that will lead to rewards.

The Table 1.1 summarises the work characteristic differences between Baby Boomers and Xers reported in the literature.

**Table 1.1 Comparison of work characteristics between Baby Boomers and Xers**

<b>Work Characteristics</b>	<b>Baby Boomer</b>	<b>Xers</b>
<b>Work values</b>	<ul style="list-style-type: none"> <li>• Work hard</li> <li>• Loyal to employer</li> <li>• Teamwork</li> <li>• Chain of command</li> <li>• Wants to manage</li> <li>• Technically challenged</li> </ul>	<ul style="list-style-type: none"> <li>• Personal satisfaction</li> <li>• Loyal to skills</li> <li>• Prefers to work alone</li> <li>• Individual is first</li> <li>• No need to lead</li> <li>• Technically savvy</li> </ul>
<b>Work attitudes</b>	<ul style="list-style-type: none"> <li>• Job promotion</li> <li>• Loyal to employer</li> <li>• Balance of work and family</li> <li>• Steady and Rhythmic</li> <li>• Formality (Authority)</li> <li>• Commitment</li> <li>• Corporate paternalism</li> </ul>	<ul style="list-style-type: none"> <li>• Job Satisfaction</li> <li>• Loyal to skills</li> <li>• Quality of life</li> <li>• Fast</li> <li>• Informality</li> <li>• Negotiation</li> <li>• Empowerment</li> </ul>
<b>Work expectations</b>	<ul style="list-style-type: none"> <li>• Money &amp; recognition Reward</li> <li>• Job security</li> <li>• Liberal</li> <li>• Sense of entitlement</li> <li>• Highly competitive</li> <li>• Step by step promotion</li> <li>• Authority</li> <li>• Employee</li> </ul>	<ul style="list-style-type: none"> <li>• Educational reward</li> <li>• Job challenged</li> <li>• Pragmatic</li> <li>• Entrepreneurial</li> <li>• Extreme individuality</li> <li>• Quick promotion</li> <li>• Flexible/Freedom</li> <li>• Ownership</li> </ul>

Although the literature reviewed for this research has shown there is a substantial difference between the work values, work attitudes and work expectations of Baby Boomers and the Xers, the research is limited to mainly western countries and little research has been undertaken in non western countries. Therefore, questions arise about the generalisability of these findings to other than western cultures.

It was therefore proposed to investigate if the work characteristics of generational groups in Taiwan's workforce are as western researchers have concluded and to investigate if the same reported differences exist. Thus, it will be the objective of this study to investigate if the conclusions on generational work characteristics drawn from western research apply equally to generational groups in Taiwan's workplace.

To guide the research, an appropriate research expectation was posited that the same differences present in western generational work groups would be present in Taiwan:

*Research expectation 1: There is a significant difference in the mean scores of constructs measuring work characteristics between Xers and Baby Boomer workers in Taiwan.*

### **Leadership styles for different generational groups**

Associated with the literature on work characteristics between Xers and Baby Boomers is an expanding literature on appropriate leadership styles for these generations. The literature points to a conclusion that Xers and Baby Boomers require different leadership styles if they are to be fully productive in modern workplaces. This study will therefore also investigate whether the different generational groups in Taiwan require different approaches to leadership as their western counterparts (Hendry, 1995; Price, 2000).

According to Davenport (1998), traditional criteria used to define successful leadership no longer fits into today's modern workplace. The new science of leadership requires a mixture of skills, such as professional skills, experience, and education. Empirical studies (Davenport, 1998) support this idea that there is no one best style of leadership. Successful leaders are said to be able to adapt their leadership style to meet subordinates' needs and particular situation.

Since a large proportion of the workforce is under the age of 35 in today's workplace, and today's Xers are intensely aware of changes in the labour market, their values and attitudes are often a reflection of their living environment. Xers are increasingly well-educated, independent and eager to upgrade their skills compared to pervious generations. Those characteristics require different leadership styles than people from other generations with less education and skills (Tulgan, 1996).

In addition, the knowledge and skills required by workers today have become more complex as many developed counties such as America, Japan, Australia and Taiwan have moved from a so-called 'industry economy' to a 'service economy' and now, are said to be moving towards a 'knowledge economy'. As more and more work becomes 'knowledge work', the need for traditional leadership styles will disappear (Abramson, 1997).

Consequently, it is argued that for a leadership style to be effective in today's modern workplace, it will need to move away from hierarchical position-based influence to a more knowledge-based influence. This is because knowledge workers do not see themselves as subordinates or employees and cannot be managed in what was previously regarded as a Theory X or Theory Y way. Knowledge workers see themselves more as 'associates' of the organisation rather than 'employees'. Thus, knowledge workers need to collaborate more with their leaders rather than be managed by them.

Table 1.2 shows the changing nature of the workforce and associated changes to the type of leadership style required.

**Table 1.2 The changing nature of the workforce and leadership styles**

**(A) The changing nature of the workforce**

	<b>Industrial Economy (to 1980)</b>	<b>Service Economy (1980-2000)</b>	<b>Knowledge Economy (2000- )</b>
Baby Boomers	*	*	*
Xers		*	*
Y Generation			*
Industrial workers      Service workers      Knowledge workers ────────────────────>───────────────────			

**(B) Associated changes to leadership style**

	<b>Industrial Economy (to 1980)</b>	<b>Service Economy (1980-2000)</b>	<b>Knowledge Economy (2000- )</b>
Leadership of workers is characterised by different types for each phase.	Predominant emphasis on theory X - that is workers need to be controlled and supervised.	Predominant emphasis on theory Y - that is importance placed on interpersonal communication (customer service) and conflict resolution skills.	Predominant emphasis on collaborative leadership and knowledge based leadership

\* Denotes present in this phase as workers

In Table 1.2 (A), the box at the top a of the table represents the changing phases of progressive economies from industrial to service economies then on to the knowledge economy and the changing characteristics of workers on a continuum from industrial workers to knowledge workers.

As indicated in the table, Baby Boomers have had to work in all three phases of a progressive economy and therefore have had to adapt from being predominantly industrial workers (that is undertaking predominantly industrial work), to service workers and now to knowledge workers. They therefore have been exposed to change at a level not experienced beforehand by workers. They have been subjected to the widest possible variety of training programs as they have had to learn new skills progressively as the economy changed through the various phases and different values and skills were required. Baby Boomers were oriented into workplaces when corporate loyalty was highly valued and they expected long careers in the one organisation. These expectations have been dealt a severe blow in the last 15 years.

On the other hand, Xers entered the workforce around 1985 (assuming that they commenced employment in their late teens) and have only ever experienced a predominantly service economy with training programs during their careers oriented to deliver the skills of the service organisation. The generation is often argued as being more resourceful, individualistic and irreverent than the Baby Boomers. In the workplace this has made them more aware of their rights and skills and less concerned with long term career goals, corporate loyalty or job status. They are easier to recruit but harder to retain in the organisation.

Whereas Generation Y (or called the dot-com generation) are only just entering the workforce and will, mainly, be entering into emerging knowledge worker organisations and positions. They are technically skilled at a young age and IT aware. They are better educated and more articulate. They are more individualistic than the Xers, are comfortable at being a member of the global village and are very idealistic (Tulgan, 1996).

Part (B) of Table 1.2 summarises some of the predominant forms of leadership thinking offered to leaders throughout the phases. In an industrial economy, the emphasis for

most leaders was on a Theory X – the need to control and supervise workers who were thought to be lazy and in need of motivation to be productive. In a service economy, the emphasis changed to Theory Y- the need to concentrate on relationships. Therefore communication, customer service and conflict resolution training predominated and became the leadership agenda. However, in a knowledge economy, the emphasis changed to collaborative leadership, where knowledge workers do not see themselves as subordinates or employees and can not be managed in a Theory X or Theory Y way. Knowledge workers see themselves more as ‘associates’ of the organisation rather than ‘employees’. These characteristics will have implications for how leaders can influence these workers.

Therefore, due to the changing nature of the job/task itself and the changing nature of subordinate characteristics, leadership styles have also had to make changes. Some experts recommend a task-oriented style is more suitable to manage Baby Boomers and for Xers, a relationship oriented style is most appropriate (McGregor, 1996).

This section has demonstrated the changes reflected in organisations and how leadership styles have had to adapt to these changes in order to meet the emerging aspirations of different generational workers. It seems likely that a leader’s style is directly influenced by the work characteristics of the employees being managed. To investigate the likelihood of different leadership styles for the two generational groups, the following research expectation was posited:

*Research expectation 2: There is a significant difference in the mean scores of the constructs measuring preferred leadership styles between Xers and Baby Boomers in Taiwan.*

### **Cultural differences**

According to Hofstede’s framework, a national culture has a major impact on employees’ work-related values and attitudes (Robbins, 1998). Therefore, ‘cultural’ issues in eastern countries may have an impact on the work values and attitudes of the generational groups in a way that differentiates results and conclusions drawn from western research. Many conclusions about the Xers have been drawn from research

conducted in the United States. It will be the objective of this research to investigate if these conclusions apply equally in Taiwan's workplace.

In general, the traditional Chinese culture results from the crossing of three doctrines. These are Buddhism, Taoism and Confucianism (Haber & Mandelbaum, 1996). They were first of all affected by the evolution of Chinese thoughts and government policy. These three doctrines have common points. For example, belief in an order based on two complementary forces, Yin and Yang, and a world of perpetual change. Table 1.3 summarises the main characteristics of Chinese business style that is influenced by the Buddhism, Taoism and Confucianism.

**Table 1.3 The main characteristics of Chinese business style influenced by the three doctrines**

	<b>Buddhism</b>	<b>Taoism</b>	<b>Confucianism</b>
<b>Business style</b>	<ul style="list-style-type: none"> <li>• Obey</li> <li>• Trust</li> <li>• Morals and stable mentality</li> </ul>	<ul style="list-style-type: none"> <li>• Control</li> <li>• Collectivism</li> <li>• Hierarchy</li> </ul>	<ul style="list-style-type: none"> <li>• Friendship</li> <li>• Network</li> <li>• Loyalty</li> </ul>

It is important to note that, as Taiwan is going through a process of westernisation and modernisation, it is unavoidable for Taiwanese to be not exposed to western management concepts. Lee (1996) indicates that the social trend toward 'westernisation' led to a more 'individualistic' and 'goals and results' orientation for eastern employees.

Traditional Chinese management is embedded in a collective society which individuals can expect others to look after them in exchange for unquestioning loyalty. In moving toward a more individualistic society, more emphasis is placed on individual rights, reward-performance and individual achievement. Moreover, traditional Chinese management attributes such as modesty and caring for the weak have been challenged with the arrival in workplaces of a younger generation where performance and competition are among the young generation's values. As a result of these influences, it is postulated that a dilemma is occurring in Taiwanese organisations between traditional and western leadership styles influenced by different perspectives held by two generations (Baby Boomers and Xers) about how an organisation should be managed.

Taiwan's is a country that has built itself in America's image, economically and politically (Thomas, 2001). Today, the impact of American culture on Taiwanese society is growing. This can be seen from a range of evidence. For example, high-ranking government officials and university professors in Taiwan usually choose to study in the U.S. (DGBAS, 2000). As the population was educated in the Japanese language before World War 11, this has now seen a major decline in the percentage of Japanese books imported to Taiwan. (Ishii, 1999).

In contrast, Japanese culture also has a strong influence on Taiwanese culture. Taiwan had the direct experience of colonial rule by the Japanese. Chu (1998) indicates that older people in Taiwan can understand the Japanese language and appreciate traditional Japanese culture.

Japanese culture has gradually begun to gain more influence due to deregulation and proliferation of availability of Japanese TV channels (Su, 1995). This influence has specially focused on the younger generation (under 30), as the majority of Japanese programs imported to Taiwan are aimed at the younger generation (Ishii, 1999).

Not surprisingly, the typical Taiwanese values of work respect for authority and education are being influenced by these outside forces and are changing. Some scholars blame this change on the influence of western culture changing the thoughts of the Taiwanese younger generation in the way they see the world. However, sociologists have indicated that the change in values was brought about by economic restructuring and the advances of new technology that are not only changing the way people work, but also the way they live (Su, 1995).

From a management perspective, many researchers believe the challenge of integrating western styles of leadership with the traditional eastern work characteristics is now confronting Taiwan society. Hofstede (1991) believes that people bring their national values into organisations. This is because people build organisations according to their values, and societies are composed of institutions and organisations that reflect the dominant values of their culture.

Therefore, this research will investigate whether the differences in generational work characteristics and associated leadership style reported in the western literature apply equally to the same generational groups in Taiwan where there is a different cultural history now pervaded by western influences.

## **Methodology**

In order to select a sample of generational workers in Taiwan the target population was set as Baby Boomers and Xers in all public and private higher educational institutions in the Taipei region and all registered, private machinery manufacturing SMEs in Kaohsiung region of Taiwan.

These industries were selected as they were accessible by the researchers and offered research sites that were thought to have fundamentally different working environments that might have some impact on the generational issues under investigation. For example, the nature of the work undertaken in a higher education institution is essentially knowledge based. Manufacturing work is process and skill oriented. The organisational climates, working conditions and levels of employee autonomy between the two sites can also be differentiated.

A total of 20 higher education institutions in the Taipei region and 148 manufacturing SMEs in machinery manufacturing in Kaohsiung county were identified. Using systematic sampling techniques, every 3<sup>rd</sup> higher education institution and every 15<sup>th</sup> name from the manufacturing SMEs was drawn from the overall list of organisations. In order to avoid the periodicity problem, the lists were checked and compared with government publications to ensure random arrangement of elements on the list so that there was no systematic pattern.

Operational definitions were developed for each construct and are summarised in following Table 1.4.

**Table 1.4 Operational concepts**

<b>Concept</b>	<b>Conceptual definition</b>	<b>Operational definition</b>
<b>Work characteristics</b>	This concept reflects the work characteristics of each generational group	Shows how strong their beliefs are on each statement about their work values, work attitudes and work expectations. ie. Job security, job satisfaction, and reward preference.
<b>Preferred leadership style</b>	This concept reflects the preferred leadership style of each generation	Shows how they prefer to be managed. ie. Relationship oriented style and task oriented style

A questionnaire was developed and used as a data collection technique. The questionnaire was divided into three sections. Section (A) consisted of five questions regarding the respondent's demographic background. Section (B) dealt with questions about work characteristics. It consisted of 38 questions on various aspects of work values, work attitudes and work expectations drawn from previous studies in the literature. Section (C) was designed to collect information about preferred leadership styles from each generation. This section consisted of nine questions on aspects of job autonomy and job participation.

Questions were rated on a five point Likert scale with 1 = strongly agree and 5 = strong disagree.

A pilot study was conducted with selected workers from the target population in each education institution and manufacturing organisation. The questionnaire was directly delivered to the respondents in order to get direct feedback on any potential problems. Several changes were made to the questionnaire in response to the feedback from the pilot study. All questionnaires were written in Chinese and back translated into English.

The overall response rate in this research was 62% with 437 useable surveys returned. Types of industry and age status were the key variables identified through the questionnaire and were used to segment the sample into groups for further comparative analysis. Therefore, results of the survey are divided into four groups based on their age and industry types. Respondents who are under 35 years old are classified as Xers and those respondents over 35 years old are classified as Baby Boomers.

After data had been processed through editing, coding and tabulation, a statistical technique was selected where Research expectation tests could be conducted. In order to test construct validity, factor analysis was also performed. Multivariate analysis of variance (MANOVA) was conducted to test for any significant differences between the variables under investigation.

## Results and Discussion

This section presents the results of the data analysis related to the research hypotheses developed earlier.

In the educational sector, the majority of the respondents (65.1 percent) were between the ages of 35-55 years and 23% were between the ages of 25-35 years. Very few were in the category of over 55 years and between the ages of 20-25 years (5.6 percent and 6.2 percent respectively). There were no respondents in the age of under 20 years. Therefore, it can be concluded that most of the respondents from the education industry are aged between 35-55 years and are therefore classified as Baby Boomers.

In contrast, in the manufacturing industry the largest group (39.4 percent) of the respondents were those between the ages of 25 and 35 years. The second largest group (24.7 percent) consisted of respondents who were between the ages of 35 and 45 years. There were 17.8 percent in the age bracket of 20-25. Moreover, 14.7 percent of the respondents fell within the age of 45-55 years, and only 3.5 percent were in the age group of over 55 years. There were no respondents less than 20 years old. Table 1.5 details the demographics of the respondents.

**Table 1.5 Demographics of respondents**

Industry status	Generational group	Frequency	Percent
Education sector	Xers	52	29.2
	Baby Boomers	126	70.8
	Total	178	100.0
Manufacturing industry	Xers	148	57.1
	Baby Boomers	111	42.9
	Total	259	100.0

Table 1.5 indicates that, in the education industry, approximately 29.2 percent of the respondents were Xers and 70.8 percent Baby Boomers. In the manufacturing industry the majority of the respondents (57.1 percent) were Xers and 42.9 percent Baby Boomers.

These demographic statistics are in accordance with the population. The education sector consists mostly of staff over the age of 35, while the manufacturing industry mostly consists of staff of a much younger age.

The variables that make up each construct were then subjected to principal component analysis. In order to calculate the appropriate number of factors, a number of techniques were deployed. These were: (1) the latent roots criterion or eigenvalue, (2) the Scree Test Criterion or Scree Plot, and (3) communality (Hair et al, 1995). Only factors with an eigenvalue of 1.0 or more, and communality above 0.50 were considered significant and retained for further investigation. Remaining variables were summarised into a smaller number of factors for multivariate analysis. All factors achieved the minimum 0.5 level (Nunnally, 1978). It can therefore be concluded that the constructs are reliable for exploratory research purposes. Table 1.6 summaries the results of the factor analysis and reliability tests undertaken.

**Table 1.6 The factor analysis and reliability test results**

<b>Construct</b>	<b>Factor</b>	<b>Explained variance%</b>	<b><math>\alpha</math> Value</b>
Work characteristics	Work values	56.2	0.7
	Work attitudes	50.0	0.7
	Work expectations	32.2	0.7
Preferred leadership style	Preferred leadership style	29.5	0.7

Having determined that the constructs under study were sufficiently reliable and valid, the data analysis proceeded to *multivariate analysis of variance (MANOVA)*.

Two-way MANOVA analysis procedures were undertaken to enable group comparisons based on generational groups and industry groups. Two levels of analysis were undertaken. The first level was to determine overall effects and a second level to

determine more specific effects related different industry groupings. The analysis allowed relationships across various groups to be examined in terms of extracted factors. In particular, comparisons were made relating to the research hypotheses.

The results of the analysis for the sample as a whole on the main effect are summarised in Table 1.7.

**Table 1.7 Two-way MANOVA tests using Wilks' Lambda**

Effect	Value	F =	P <
Generation groups overall	.992	.876	.478
Generational groups within industries	.936	7.386	.000

*Significant when P < .05*

Table 1.7 shows the overall result suggested there was no significant difference between generational groups (Xers and Baby Boomers) on the combined dependent variables: F=.876, P=.478, and Wilks' Lambda = .992.

However, there was a statistically significant difference between industries (education and manufacturing industry) on the combined dependent variables: F=7.386, P =.000, and Wilks' Lambda = .936, where P value less than significant level 0.05.

In order to identify which of the industry groups contained a significance difference in mean scores, a second level of analysis was conducted using a one-way MANOVA. The results of the second level analysis are shown in Table 1.8.

**Table 1.8 One-way MANOVA tests Wilks' Lambda for education and manufacturing industries.**

Effect	Value	F =	P <
Education industry	.978	.979	.420
Manufactory industry	.959	2.704	.031

*Significant when P < .05*

As indicated in Table 1.8, there was a statistically significant difference between generational groups within the manufacturing industry on the combined dependent variables: F = 2.704, P = .031 and Wilks' Lambda = .959 and no significant difference in the education sector on the combined dependent variables: F = .979, P = .420 and Wilks' Lambda = .978.

To further explore the differences in generational group scores in the manufacturing industry, an investigation of the significantly different factors was conducted through one-way MANOVA. Table 1.9 shows the results.

**Table 1.9 Main effect evaluation for differences between two generations**

Industry status	Extract factors	Generational group	Mean	Standard Deviation	F =	P <
Education industry	Work values	Xers	2.08	.33	2.212	.139
		Baby Boomers	2.15	.30		
	Work attitudes	Xers	2.26	.38	.059	.808
		Baby Boomers	2.27	.35		
	Work expectations	Xers	2.34	.54	2.255	.135
		Baby Boomers	2.50	.50		
Preferred leadership style	Xers	2.26	.53	.228	.633	
	Baby Boomers	2.27	.51			
Manufacturing	Work values	Xers	2.44	.51	6.641	<b>.011</b>
		Baby Boomers	2.27	.56		
	Work attitudes	Xers	2.55	.46	8.377	<b>.004</b>
		Baby Boomers	2.38	.49		
	Work expectations	Xers	2.66	.55	7.634	<b>.006</b>
		Baby Boomers	2.45	.63		
Preferred leadership style	Xers	2.86	.45	6.645	<b>.010</b>	
	Baby Boomers	2.92	.40			

Significant when  $P < .05$

Table 1.9 reveals the extracted factors and their associated mean scores. The results of MANOVA reveal that there is a significant difference between Xers and Baby Boomers in the manufacturing industry on each of the four extracted factors. There was no difference in the mean scores for each of the extracted factors in the education sector.

Therefore, the first research expectation:

*Research expectation 1: There is a significant difference in the mean scores of constructs measuring work characteristics between Xer and Baby Boomer workers in Taiwan.*

is accepted for generational groups in the Taiwan manufacturing industry and rejected for generational groups in the Taiwan higher education sector. There is a significant

difference between Xers and the Baby Boomers in all variables that comprise the work characteristic construct in the Taiwan manufacturing industry.

The results of this study, in respect of the Taiwan manufacturing industry are supported by western research. In previous research, it was argued that Xers have different work characteristics from the Baby Boomers (Coupland, 1991; Itzhak, 1999; Joyner, 2000; Leung, 2000; Schubert, 2000; Tulgan, 1996; Wilkinson, 2000).

However, the research has demonstrated that western research results in respect to generational differences do not apply to the generational workers in the Taiwan education sector.

Having tested the first research expectation, attention was turned to the second of the research expectations:

*Research expectation 2: There is a significant difference in the mean scores of the constructs measuring preferred leadership styles between Xer and Baby Boomer workers in Taiwan.*

To investigate the differences in preferred leadership style for the generational groups a one-way MANOVA was conducted. Table 1.10 shows the results.

**Table 1.10 Main effect evaluation for differences in preferred leadership style**

Factor	Industry type	Generational group	Mean	F =	P =
Preferred managerial style	Education	Xers	2.131	.228	.633
		Baby Boomers	2.172		
	Manufacturing	Xers	2.472	6.645	.010
		Baby Boomers	2.285		

Significant when  $P < .05$

As shown in Table 1.10, there is a significant difference between the two generational groups on the extracted factor of preferred leadership style in the Taiwan manufacturing industry. Specifically, the F value was found to be 6.645, at a significant level of .010. However, the analysis did not indicate a significant difference between the two generational groups in the Taiwan higher education sector.

Therefore, the second research expectation is accepted for generational groups in the Taiwan manufacturing industry and rejected for generational groups in the Taiwan higher education sector. There is a significant difference between Xers and the Baby Boomers for the preferred leadership construct in the Taiwan manufacturing industry.

However, the results are not supported in Taiwan higher education industry. There was no significant difference between two generational groups in terms of preferred leadership style in Taiwan higher education industry.

The results of this study, in respect of the Taiwan manufacturing industry are supported by western research. Previous research indicated that Baby Boomers tend to be more loyal to employers and willing to accept a 'chain of command' leadership style. Accordingly, a task-oriented leadership style is more acceptable to Baby Boomers. On the other hand, Xers seek their own power and voices and see authority as unreasonable toughness. They prefer their employer to treat them more as partner rather than a worker. Accordingly, Xers prefer to be managed under a relationship-oriented leadership style (Armour, 1997; Leung, 2000; Levin, 2001; Nagle, 2001; Tulgan, 1996).

## **Conclusions**

The assumption in this research was that the generation gap between Baby Boomers and Xers found in western research would also be found to exist in generational groups in eastern workplaces. However, since national culture plays an important role in determining people's values, and these values are thought to be translated into the workplace, it was considered that eastern cultural influences might have an impact on the applicability of western research in Taiwan.

However, eastern cultural influences may themselves be influenced by the forces such as globalisations and in particular the export of Western (mostly American) management practices and theories into Taiwan.

There is therefore a question of whether these forces and theories have an impact on organisational managerial issues in Taiwan?

The research found significant differences between Baby Boomers and Xers in aspects of work characteristics and preferred managerial style, specifically in the Taiwan manufacturing industry. These findings are consistent with the results of prior western research.

However, the research also found no differences between the generational groups in the educator sector in Taiwan. This is not consistent with the general western literature in regard to work characteristics and preferred leadership styles.

The work characteristic construct (work values, work attitudes and work expectations) did not show a difference between the two generational groups in the education sector. The reason for the difference between employees in the education and manufacturing industries may be due to the nature of the industry. The industry culture and employee work characteristics in the education sector are very different from employees in the manufacturing industry. In the education sector, all employees place a high value on personal development, job autonomy, job involvement and social recognition, power and prestige.

The research found that people who work in different industries show different work characteristics. In the education sector, all staff have significant autonomy over their own time management because they need to manage their own working hours, development agendas and the relationships they establish with students and other staff. Indeed, this is one of the main reasons why staff select higher education as a career (Rowley 1996). Staff in the education industry are also highly motivated with high self-actualising needs (Pastor 1982; Glickman 1982). According to Maslow's theory, individuals who have high self-actualisation needs are likely to exercise autonomy and independence and to develop skills (Collins & McLaughlin 1996). Employees in the manufactory industry do not enjoy this sophisticated cultural and enlightened environment.

In addition, as would be expected, the research found that the educational level of respondents in the education sector were much higher than staff in the manufacturing industry with most staff having attained at least university degrees, a majority of which were postgraduate. The research indicates that people with a higher level of education tend to be more individualistic and have high self-esteem and prefer job autonomy (Rowley 1996; Sekaran 2000).

Accordingly, it can be concluded that, in respect of work characteristics, there is a generation gap in Taiwan's manufacturing industry but not in the education sector.

Concerning preferred leadership style, the research found significant differences between Baby Boomers and Xers in preferred leadership style in the Taiwan manufacturing industry. These findings are consistent with the results of prior western research.

However, the research also found no differences in preferred leadership style between the generational groups in the educator sector in Taiwan. This is not consistent with the general western literature in regard to preferred leadership styles.

The difference in preferred leadership style for generational groups between the two industries might be explained by the same reasons advanced above for the differences in work characteristics. That is, the nature of the industries are very different, the environment and aspirations of workers in the two industries are also far apart.

Specifically in the Taiwanese manufacturing industry, it could be said that the two generational groups prefer to be managed under different leadership styles. This is supported by the literature. In the manufacturing industry, the Xers place high value on the importance of participative decision-making and prefer have an independence in their job with autonomy. They prefer a relationship-oriented leadership style. On the other hand, Baby Boomers prefer teamwork and are more comfortable with leadership and direction from their supervisor. Thus, a task-oriented leadership style is suggested as preferred by the Baby Boomer.

This finding is consistent with the results of prior research. Researchers indicate that Baby Boomers tend to be more loyal to employers and willing to accept a 'chain of command' leadership style. However, Xers seek their own power and voices and see authority as unreasonable toughness. They also prefer their employer to treat them as a partner rather than a worker. Xers prefer to be managed under a relationship-oriented leadership style (Armour 1997; Leung 2000; Levin 2001; Nagle 2001; Tulgan 1996; Yankelovich 2000).

In respect of the cultural factors in this research, many studies have shown that independence at work tends to be actualised for people who are more individualistic or come from low power distance cultures such as America. However, Taiwanese culture

is categorised as high power distance with collectivism according to Hofstede (1980). Therefore, it can be concluded from this study that the Taiwanese culture is changing to be more individualistic with lower power distance. This is more so in the Xer generation. The changes maybe because of the influence on Taiwanese workers from foreign cultures especially from western countries.

Several limitations of the study should be noted. First, this study was conducted in Taiwan and was restricted to the higher education sector and manufacturing industry. Therefore outcomes can not be applied to all types of industries in Taiwan. Second, the study design is cross-sectional rather than longitudinal. More time could cause different perceptions in terms of work characteristics and preferred leadership style. Further research may need to be conducted with a longitudinal analysis design.

Despite some of the limitations mentioned above, the results of this research still provide some direction for leaders and researchers. Leaders should recognise the different work characteristics between generational groups and apply leadership styles that will positively contribute to employee motivation. Changes to job design, the system of rewards, and organisation structure might also result. Management decisions based on valid models of employee characteristics are much more likely to achieve success than those based on wrong or inappropriate assumptions (Stone, 1998).

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