



# Leadership style

## The X Generation and Baby Boomers compared in different cultural contexts

Leadership style  
in cultural  
contexts

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Received December 2002  
Revised February 2003  
Accepted August 2004

### Abstract

**Purpose** – Western researchers have concluded that generational groups of workers have different work characteristics and prefer different leadership styles. This paper investigates whether Western research applies equally to generational groups in Taiwan's workplaces, specifically in the higher education sector and manufacturing industry.

**Design/methodology/approach** – A total of 20 higher education institutions and 148 manufacturing SMEs in machinery manufacturing in Taipei were identified. After operational definitions for constructs were defined, a questionnaire was developed and administered. 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.

**Findings** – The research shows that generational groups in 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.

**Originality/value** – The results of this research 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.

**Keywords** Leadership style, Work organization, Baby boomer generation, Baby buster generation, Taiwan

**Paper type** Research paper

### Introduction

Today's workforce can be divided into three distinct groups of people. There are the Baby Boomers, the X Generation (Xers) and the Y Generation (dot.com generation). Baby Boomers are people born between the years 1945 and 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 the Second World War. The Y Generation or the "dot.com" generation are people who were born after 1980 (Solomon, 1992). This group of workers is 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.



Leadership & Organization  
Development Journal  
Vol. 26 No. 1, 2005  
pp. 35-50

© Emerald Group Publishing Limited  
0143-7739

DOI 10.1108/01437730510575570

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. These include work values, work attitudes and work expectations of employees.

One significant difference between individuals 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. Baby Boomers tend to work hard and are generally loyal to their employer. Baby Boomers are willing to and expect 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, and thus have 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 and 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: 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 (Niemiec, 2000). However, Levin (2001) argues that Xers do care about pats on the back and they do things that will lead to rewards.

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

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 non-Western cultures.

It was therefore proposed to investigate whether the work characteristics of generational groups in Taiwan’s workforce are the same as Western researchers have concluded, and to investigate whether 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.

Work characteristics	Baby Boomer	Xers
Work values	Work hard Loyal to employer Teamwork Chain of command Wants to manage Technically challenged	Personal satisfaction Loyal to skills Prefers to work alone Individual is first No need to lead Technically savvy
Work attitudes	Job promotion Loyal to employer Balance of work and family Steady and rhythmic Formality (authority) Commitment Corporate paternalism	Job satisfaction Loyal to skills Quality of life Fast Informality Negotiation Empowerment
Work expectations	Money and recognition reward Job security Liberal Sense of entitlement Highly competitive Step by step promotion Authority Employee	Educational reward Job challenged Pragmatic Entrepreneurial Extreme individuality Quick promotion Flexible/freedom Ownership

**Table I.**  
Comparison of work  
characteristics between  
Baby Boomers and Xers

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

- H1.* There is a significant difference in the mean scores of constructs measuring work characteristics between Xers and Baby Boomer workers in Taiwan.

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*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 and Prusak (1998), traditional criteria used to define successful leadership no longer fit 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 and Prusak, 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 situations.

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 previous generations. Those characteristics require different leadership styles from people from other generations with less education and fewer skills (Tulgan, 1996).

In addition, the knowledge and skills required by workers today have become more complex, as many developed countries 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 II shows the changing nature of the workforce and associated changes to the type of leadership style required.

The top part of Table II 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.

	Industrial economy (to 1980)	Service economy (1980-2000)	Knowledge economy (2000-)
<i>The changing nature of the workforce</i>			
Baby Boomers	$E_P$	$E_P$	$E_P$
Xers		$E_P$	$E_P$
Y Generation			$E_P$
	Industrial workers	→ Service workers	→ Knowledge workers
<i>Associated changes to leadership style</i>			
Leadership of workers is characterised by different types for each phase	Predominant emphasis on Theory X, i.e. that workers need to be controlled and supervised	Predominant emphasis on Theory Y, i.e importance placed on interpersonal communication (customer service) and conflict resolution skills	Predominant emphasis on collaborative leadership and knowledge-based leadership

**Table II.**  
The changing nature of  
the workforce and  
leadership styles

**Note:**  $E_P$  denotes present in this phase as workers

As indicated in Table II, 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 (i.e. undertaking predominantly industrial work), to service workers and now to knowledge workers. They have therefore been exposed to change at a level not previously experienced by workers. They have been subjected to the widest possible variety of training programmes 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 one organisation. These expectations have been dealt a severe blow in the last 15 years.

On the other hand, Xers entered the workforce in around 1985 (assuming that they commenced employment in their late teens) and have only ever experienced a predominantly service economy with training programmes during their careers oriented to deliver the skills of the service organisation. It is often argued that this generation is 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.

Generation Y (or the dot.com generation) is 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 with being a member of the global village, and are very idealistic (Tulgan, 1996).

The lower part of Table II 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 the 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 the knowledge economy, the emphasis changed to collaborative leadership, where knowledge workers do not see themselves as subordinates or employees and cannot 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 change. Some experts recommend that a task-oriented style is more suitable to manage Baby Boomers, and that 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 generations of 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 hypothesis was posited:

- H2. 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 *et al.*, 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 US. It will be the objective of this research to investigate whether 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 and 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, i.e. yin and yang, and a world of perpetual change. Table III summarises the main characteristics of Chinese business style that is influenced by Buddhism, Taoism and Confucianism.

It is important to note that as Taiwan is going through a process of Westernisation and modernisation, it is unavoidable for the Taiwanese to be not exposed to Western management concepts. Lee (1996) indicates that the social trend toward

**Table III.**  
The main characteristics of Chinese business style influenced by three doctrines

Buddhism	Taoism	Confucianism
Obey	Control	Friendship
Trust	Collectivism	Network
Morals and stable mentality	Hierarchy	Loyalty

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“Westernisation” has led to a more “individualistic” and “goals and results” orientation for Eastern employees.

Traditional Chinese management is embedded in a collective society in 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: performance and competition are among the younger 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 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 USA (Directorate-General of Budget, Accounting and Statistics, 2000). As the population was educated in the Japanese language before the Second World War, a major decline has been seen in the percentage of Japanese books imported to Taiwan (Ishii *et al.*, 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 the proliferation of availability of Japanese TV channels (Su, 1995). This influence has specially focused on the younger generation (aged under 30), as the majority of Japanese programmes imported to Taiwan are aimed at the younger generation (Ishii *et al.*, 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 younger Taiwanese generation and influencing the way they see the world. However, sociologists have indicated that the change in values was brought about by economic restructuring, and advances in new technology are not only changing the way people work, but also the way they live (Su, 1995).

From a management perspective, many researchers believe that the challenge of integrating Western styles of leadership with traditional Eastern work characteristics is now confronting Taiwanese 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 styles reported in the Western literature apply equally to the same generational groups in Taiwan, where there is a different cultural history now being 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 third higher education institution and every 15th 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 Table IV.

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 delivered directly to the respondents in order to get direct feedback on any potential

Concept	Concept definition	Operational definition
Work characteristics	This concept reflects the work characteristics of each generational group	Shows how strong each generational group's beliefs are on each statement about their work values, work attitudes and work expectations (i.e. job security, job satisfaction, and reward preference)
Preferred leadership style	This concept reflects the preferred leadership style of each generation	Shows how they prefer to be managed (i.e. relationship-oriented style and task-oriented style)

**Table IV.**  
Operational concepts

problems. Several changes were made to the questionnaire in response to 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 per cent, with 437 useable surveys returned. Types of industry and age status were the key variables identified through the questionnaire, and these were used to segment the sample into groups for further comparative analysis. Therefore, the results of the survey are divided into four groups based on their age and industry type. Respondents under 35 years old are classified as Xers and 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 hypotheses 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 per cent) were between the ages of 35 and 55 years, and 23 per cent were between the ages of 25 and 35 years. Very few were in the category of over 55 years and between the ages of 20 and 25 years (5.6 and 6.2 per cent, respectively). There were no respondents under the age of 20 years. Therefore, it can be concluded that most of the respondents from the education industry are aged between 35 and 55 years, and are therefore classified as Baby Boomers.

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

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

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

**Table V.**  
Demographics of  
respondents

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:

- the latent roots criterion or eigenvalue;
- the scree test criterion or scree plot; and
- 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. The 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 VI summarises the results of the factor analysis and reliability tests undertaken.

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 the second level was to determine more specific effects related to 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 VII.

Table VII shows the overall result suggested there was no significant difference between generational groups (Xers and Baby Boomers) on the combined dependent variables:  $F = 0.876$ ,  $p = 0.478$ , and Wilks' lambda = 0.992.

However, there was a statistically significant difference between industries (education and manufacturing industry) on the combined dependent variables:

Construct	Factor	Variance explained (per cent)	$\alpha$
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

**Table VI.**  
Factor analysis and  
reliability test results

Effect	Value	$F$	$p$
Generation groups overall	0.992	0.876	< 0.478
Generational groups within industries	0.936	7.386	< 0.000

**Table VII.**  
Two-way MANOVA  
tests using Wilks' lambda

**Note:** Significant when  $p < 0.05$

$F = 7.386$ ,  $p = 0.000$ , and Wilks' lambda = 0.936, where the  $p$  value is less than the significant level (i.e. 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 VIII.

As indicated in Table VIII, there was a statistically significant difference between generational groups within the manufacturing industry on the combined dependent variables ( $F = 2.704$ ,  $p = 0.031$  and Wilks' lambda = 0.959) and no significant difference in the education sector on the combined dependent variables ( $F = 0.979$ ,  $p = 0.420$  and Wilks' lambda = 0.978).

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 IX shows the results.

Table IX 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.

Effect	Value	$F$	$p$
Education industry	0.978	0.979	<0.420
Manufactory industry	0.959	2.704	<0.031

**Note:** Significant when  $p < 0.05$

**Table VIII.**  
One-way MANOVA  
tests: Wilks' lambda for  
education and  
manufacturing industries

Industry	Extract factors	Generational group	Mean	Standard deviation	$F$	$p$
Education	Work values	Xers	2.08	0.33	2.212	<0.139
		Baby Boomers	2.15	0.30		
	Work attitudes	Xers	2.26	0.38	0.059	<0.808
		Baby Boomers	2.27	0.35		
	Work expectations	Xers	2.34	0.54	2.255	<0.135
		Baby Boomers	2.50	0.50		
	Preferred leadership style	Xers	2.26	0.53	0.228	<0.633
		Baby Boomers	2.27	0.51		
Manufacturing	Work values	Xers	2.44	0.51	6.641	<0.011
		Baby Boomers	2.27	0.56		
	Work attitudes	Xers	2.55	0.46	8.377	<0.004
		Baby Boomers	2.38	0.49		
	Work expectations	Xers	2.66	0.55	7.634	<0.006
		Baby Boomers	2.45	0.63		
	Preferred leadership style	Xers	2.86	0.45	6.645	<0.010
		Baby Boomers	2.92	0.40		

**Note:** Significant when  $p < 0.05$

**Table IX.**  
Main effect evaluation for  
differences between two  
generations

Therefore, *H1* 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 Taiwanese manufacturing industry are supported by Western research. In previous research, it was argued that Xers have different work characteristics from Baby Boomers (Coupland, 1991; Itzhak, 1999; Joyner, 2000; Leung *et al.*, 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 generational workers in the Taiwanese education sector.

Having tested the first research hypothesis, attention was turned to *H2*. To investigate the differences in preferred leadership style for the generational groups, a one-way MANOVA was conducted. Table X shows the results. As shown in Table X, 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 0.010. However, the analysis did not indicate a significant difference between the two generational groups in the Taiwanese higher education sector. Therefore, the second research expectation is accepted for generational groups in Taiwanese manufacturing industry and rejected for generational groups in the Taiwanese higher education sector. There is a significant difference between Xers and Baby Boomers for the preferred leadership construct in Taiwanese manufacturing industry.

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

The results of this study in respect of the Taiwanese 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 *et al.*, 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

Factor	Industry type	Generational group	Mean	<i>F</i>	<i>p</i>
Preferred managerial style	Education	Xers	2.131	0.228	0.633
		Baby Boomers	2.172		
	Manufacturing	Xers	2.472		
		Baby Boomers	2.285		

**Note:** Significant when *p* < 0.05

**Table X.**  
Main effect evaluation for differences in preferred leadership style

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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 forces such as globalisations and in particular the export of Western (mostly American) management practices and theories into Taiwan. There is therefore a question as to 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 Taiwanese manufacturing industry. These findings are consistent with the results of previous 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 and McLaughlin, 1996). Employees in the manufacturing 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 Taiwanese manufacturing industry. These findings are consistent with the results of previous 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 natures of the industries are very different, and the environment and aspirations of workers in the two industries are also far apart.

Specifically, in Taiwanese manufacturing industry, it can 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, Xers place high value on the importance of participative decision-making and prefer to have independence and autonomy in their job. 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 to be 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 *et al.*, 2000; Levin, 2001; Nagle, 2001; Tulgan, 1996; Yankelovich Inc., 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 Taiwanese culture is changing to become more individualistic with lower power distance. This is more the case in the X Generation. This change may be due to 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, the outcomes cannot 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 directions for leaders and researchers. Leaders should recognise the different work characteristics between generational groups and apply leadership styles that will contribute positively 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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