Association for Information Systems AIS Electronic Library (AISeL)

AMCIS 2009 Proceedings

Americas Conference on Information Systems (AMCIS)

2009

Visible Minority Work Experiences in Canadian IT/ICT Sectors

Wendy Cukier Ryerson University, wcukier@ryerson.ca

Margaret Yap *Ryerson University,* myap@ryerson.ca

Mark Robert Holmes *Ryerson University*, m8holmes@ryerson.ca

Charity-Ann Hannan Ryerson University, channan@ryerson.ca

Follow this and additional works at: http://aisel.aisnet.org/amcis2009

Recommended Citation

Cukier, Wendy; Yap, Margaret; Holmes, Mark Robert; and Hannan, Charity-Ann, "Visible Minority Work Experiences in Canadian IT/ICT Sectors" (2009). *AMCIS 2009 Proceedings*. 768. http://aisel.aisnet.org/amcis2009/768

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2009 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Visible Minority Work Experiences in Canadian IT/ICT Sectors

Wendy Cukier Ryerson University wcukier@ryerson.ca Mark Robert Holmes Ryerson University m8holmes@ryerson.ca Margaret Yap Ryerson University myap@ryerson.ca Charity-Ann Hannan Ryerson University channan@ryerson.ca

ABSTRACT

Corporate leaders have joined industry associations and government in maintaining that supporting diversity is an important part of the solution to the skills shortage in the Information and Communications Technology Sector (ICT). Considerable research and discussion has focused on the plight of minority groups in Canada and the gap between their potential and their experience in the workforce generally, and in the ICT sector. Less attention has been focused on the gaps between visible minority groups and gender. Our study makes an important contribution by examining workplace perceptions of more than 6783 managers with a minimum of 10 years experience in nine large Canadian companies in the ICT Sector. The principal conclusions of the paper are that there is a significant gap between the workplace perceptions of visible minorities and white/Caucasians, and to a lesser degree, men and women employees in the ICT sector.

Keywords

Information Communications Technology, Diversity, Career Satisfaction

INTRODUCTION

Corporate leaders have joined industry associations and government in maintaining that supporting diversity is an important part of the solution to the skills shortage in the Information and Communications Technology Sector (ICT). However, studies have shown that barriers to visible minorities and women persist. In Canada, the term "visible minority" refers to a person who is not an Aboriginal person, who is non-Caucasian in race or who is "non-white" in colour, as defined under the Employment Equity Act. Considerable research and discussion has focused on the objective differences between visible minorities and women, such as salary and promotions. However, less attention has been focused on visible minority and female employees' subjective perceptions of their work experiences, including commitment and career satisfaction. This paper draws on the results of a survey of more than 6783 managers with a minimum of 10 years experience in nine large Canadian companies in the Information Communications and Technology Sector (ICT) to identify gaps in workplace perceptions between visible minorities and white/Caucasians, and men and white of the methodology used within this study. Findings, analysis and discussion are then presented followed by the conclusion.

BACKGROUND

Increasingly companies in all sectors are suggesting that supportive diversity practices are, at least in part, the solution to addressing the skills shortage. Pointing to demographic shifts including the aging baby boomers and declining fertility rates, the Royal Bank of Canada has noted that 100% of labour market growth in Canada in 2011 will come from immigration- of which, most, identify as visible minorities (Palameta, 2004). In order to address this looming skills shortage, many corporations are advocating more inclusive labour policies and practices to ensure that visible minorities and women, in particular, are more fully employed.

Industry leaders, specifically those in the ICT sector have been ringing the alarm bells about a skills shortage for more than a decade, increasingly to a greater degree in recent years (Boisvert, 2007). A new survey shows that a growing shortage of IT skills has put upward pressure on salaries as employers choose experienced workers over graduates....a continuation of what [IT World Canada] calls a "sobering trend" will hurt economic growth and productivity "across all industries" (CBC, 2007). The Information Communications Technology Council (ICTC) is projecting that there will be approximately 7,585 new

computer science and engineering graduates which will meet 49%-75% of demand (2008). The remaining needs will be filled through immigration with approximately 7,588 immigrants with ICT skills entering Canada annually (ICTC, 2008).

We see many global and Canadian hi-tech companies espousing commitments to diversity as a strategic direction to address their employment needs as well as to respond to emerging markets (Webster, 2007). However, in spite of the espoused commitments to diversity, challenges remain for visible minorities and women in the workplace. Specifically, studies have found that visible minorities earn less money, and receive fewer promotions than white/Caucasians (HRSDC, 2005; Hum and Simpson, 1999; Igbaria and Wormley, 1995; Pendakur and Pendakur, 1998). Women also earn less money than men (Blau & Khan, 1992; Ranson and Reeves, 1996). Additionally, differences have been found between visible minority, white/Caucasian, men and women employees' subjective perceptions of their work experiences, which have been linked to important business outcomes such as customer satisfaction, loyalty, profitability, productivity, and lower employee turnover (Harter, Schmidt and Hayes, 2002).

These subjective perceptual measures include: organizational commitment, career satisfaction, relationships with managers and colleagues, career advancement and development, and diversity and inclusion in the workplace (Catalyst and The Diversity Institute, 2007; Donovan, Drasgow, and Munson, 1998; Greenhaus, Parasuraman and Wormley, 1990; Harter et al., 2002; Kochan, Bezrukova, Ely, Jackson, Joshi, Jehn, Leonard, Levine and Thomas, 2003; Mowday, Steers and Porter, 1979). More recently, the underutilization of foreign credentials has also been linked to business outcomes (Reitz, 2001, 2007). Despite recent diversity efforts however, studies have shown that Blacks report lower commitment, lower careers satisfaction, lower rates of advancement, less career support from their supervisors, and lower organizational acceptance than white/Caucasians (Cox and Nkomo, 1991; Greenhaus, et al., 1990; Igbaria and Wormley, 1992; Igbaria and Wormley, 1995). In addition, visible minorities are more likely than White/Caucasians to perceive that their foreign credentials are being under-utilized (Catalyst and The Diversity Institute, 2007).

In comparison, studies have found that women are less committed to their organizations than men while their career satisfaction changes over time, so that they become less satisfied than men by mid-career, although there is no difference between genders in early career (Marsden, Kalleberg and Cook, 1993; Schneer and Reitman, 1994). Women also reported lower levels of career support from their supervisors, and lower levels of organizational acceptance than men (Allen and Griffeth, 1997; Johlke, et al., 2002). In light of the projected skills shortage, these differences between visible minorities' and white/Caucasian's perceptions and men's perceptions prompt us to examine these associations. A better understanding of these associations, in turn, can highlight the foci for diversity initiatives.

Organizations choose to implement diversity initiatives to improve their bottom-line, form better relationships among employees, address legal concerns, and/or to enhance social responsibility (Hood, 2003; Richard and Munthi, 2008; Wentling and Palma-Rivas, 1998, 2000). If effective, diversity initiatives can facilitate inclusive environments where employees embrace diversity, feel more satisfied with their careers, and are more committed to their organization (Ensher, Grant-Vallone and Donaldson, 2001; Sippola, 2007). On the other hand, in-effective diversity initiatives can have negative effects on employees and the organizations they work for (Richard, 2000; Sippola, 2007). Identifying and implementing 'effective' diversity initiatives has therefore become an important strategy for many organizations (Kulik, Pepper, Roberson and Parker, 2007).

Building on the previous literature this paper examines the differences in perceptions between visible minorities and white/Caucasians and men and women and the intersection between visible minority status and gender. Although previous research has extensively examined employees' objective work experiences, employees' workplace perceptions must also be explored, because they affect business outcomes (Harter el al., 2002). This paper therefore proposes to contribute to the literature by examining the gaps in workplace perceptions of visible minorities compared to white/Caucasians and men compared to women.

RESEARCH QUESTIONS

Our study explores six inter-related questions including:

Are there differences between visible minority and white/Caucasian employees in Canadian ICT firms in the following subjective perceptions? Similarly, are there differences between males and females?

- 1. Organizational commitment;
- 2. Career Satisfaction;
- 3. Relationships with managers and colleagues;
- 4. Career advancement and development;

- 5. Diversity and inclusion; and
- 6. Educational attainment and credentials.

METHODOLOGY

This paper utilizes survey data collected as part of a larger study that examined career advancement of visible minorities in corporate Canada (Catalyst and The Diversity Institute, 2007). A total of 43 organizations and firms that agreed to participate were invited to complete an online survey which included open and close ended questions. Over 17,000 pre-managers, managers, professionals and executives responded to the survey between October 2006 and February 2007 - a response rate of 29%. Of these, 6783 were employed in ICT sector companies and we have analyzed these results below. Of the full-time employees who responded, 53 percent were male and 50 percent possessed some forms of university education. The average tenure with their respective organizations was 14 years, at an average age of 42 with an average salary of \$79,861. There are no discernable differences based on the demographic characteristics between the selected sample and the employees who completed the survey with the exception of salary.

FINDINGS

T-test's on the difference by gender and the difference by visible minority status were then undertaken to determine if the groups were significantly different from one another.

Organizational Commitment

More than 80% of all respondents identified with their organizations core values. Furthermore, more than 85% of respondents were proud to tell others that they were part of their employers organization, and more than 90% indicated that they were willing to put in a great deal of effort beyond what is normally expected. Men were less likely than women (d=9%, p<0.001) and visible minorities were less likely than white/Caucasians (d=11%, p<0.001) to intend to stay with their organization. The interrelationship between these two variables can be seen in Figure 1 below.

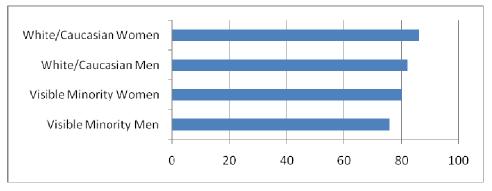


Figure 1: Proportion of respondents who agreed/strongly agreed that they would stay with their organization.

Career Satisfaction

Visible minority (65%) respondents were also less satisfied with their progress towards meeting their overall career goals, in comparison to white/Caucasian (78%) respondents (d=13%, p<0.001). Although the gap between white/Caucasian respondents and visible minority respondents was larger there was also a gap between male and female respondents (d=8%, p<0.001), such that 72% of men were satisfied, while 79% of female respondents were satisfied. Furthermore, of visible minority respondents, 50% stated that they were satisfied with their progress towards meeting their income goals, in comparison to 64% of white/Caucasians (d=14%, p<0.001). While 67% of white/Caucasians were satisfied with their progress towards meeting their goals for advancement, only 52% of visible minorities were satisfied with their progress (d=16%, p<0.001). Similarly, 63% percent of visible minorities reported as feeling satisfied with their progress towards meeting skills development goals, compared to 72% of the white/Caucasian respondents (d=8%, p<0.001). The gap between male and female respondents (d=8%, p<0.001) and the development of new skills (d=6, p<0.001), is smaller than the gap experience by visible minority respondents when compared to white/Caucasian respondents.

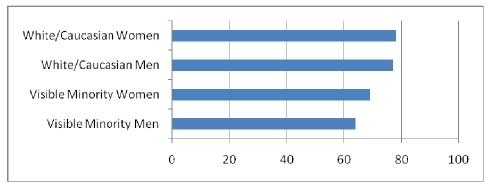
Goals	White/ Caucasian		Visible Minority		Gender	Visible Minority	
Goals	Female	Male	Female	Male	Difference	Difference	
Overall Goals	82%	75%	69%	62%	8%***	13%***	
Income Goals	68%	60%	53%	49%	8%***	14%***	
Advancement Goals Skills Development	72%	63%	56%	49%	9%***	16%***	
Goals	75%	69%	67%	62%	6%***	8%***	

Table 1: Satisfaction with Progress towards Meeting Goals of White/Caucasian and Visible Minority Respondents

T-test significant at (p<0.05), (** p<0.01), (*** p<0.001)*

Relationship with Managers and Colleagues

Both men (71%) and women (73%) indicated that their manager provides them with helpful feedback (d=2%, p<0.05). In contrast, 70% of visible minority respondents indicated that their manager provides helpful feedback about their performance compared to 73% of white/Caucasian respondents (d=3%, p<0.01). When asked if they were treated fairly, 78% of visible minorities agreed, compared to 85% of white/Caucasian respondents (d=7%, p<0.001). Furthermore, Visible minority respondents (75%) believe that their manager evaluates their performance fairly, compared to 79% of white/Caucasian respondents (d=5, p<0.01). More than 90% of all respondents indicated that their colleagues treat them with respect. While 89% of white/Caucasian respondents and 85% of visible minority respondents (d=5%, p<0.001) indicated that they receive the support they need from other co-workers to meet their work objectives, there was less of a difference between male and female respondents (d=1%, p<0.01). Sixty-six percent of visible minority respondents (women 69%, men 64%), compared to 77% of white/Caucasian respondents (women 78%, men 77%), agreed that their colleagues include them in informal networking (d=11%, p<0.001), as can be seen in Figure 2 below.





Career Advancement and Development

When asked to comment on whether they believed "who you know" was more important than "what you know", a higher percentage of visible minority (70%) respondents agreed with the statement, compared to white/Caucasian (60%) respondents (d=10%, p<0.001), as seen in Table 2 below. Furthermore, an even greater disparity is revealed between white/Caucasian and visible minority responses (d=20%, p<0.001) to a statement that "people tend to recommend people of their own ethnicity for high visibility assignments", while there is very little difference between the opinions of males and females (d=1%, p<0.01). A greater number of visible minority respondents (45% & 46%) believed that they are "held to higher performance standards than their peers", compared to the white/Caucasian respondents (32% & 34%) (d=13%, p<0.001). Of the visible minority respondents 35% agreed that their organizations talent identification process is fair, compared to 43% of white/Caucasians (d=8, p<0.001). Similarly, more visible minority respondents (54%) than white/Caucasian respondents (37%) reported having fewer role models in their organization (d=17, p<0.001).

	White/ Caucasian		Visible Minority		Gender	Visible
	Female	Male	Female	Male	Difference	Minority Difference
I believe "who you know" (or "who knows you") is more important than "what you know" when deciding who gets career development opportunities in my organization.	61%	59%	69%	70%	1%	10%***
I feel like I am held to a higher performance standard than peers in my organization.	34%	32%	46%	45%	1%**	20%***
In my organization, people tend to recommend people of their own ethnicity for high visibility assignments.	10%	8%	27%	31%	1%*	13%***
I believe my organization's talent identification process is fair.	42%	44%	35%	35%	1%	8%***
There are few role models for me in my organization.	40%	35%	56%	53%	3%	17%***

Table 2: Career Advancement and Development Questions Responses of White/Caucasian and Visible Minority Respondents

T-test significant at (p<0.05), (** p<0.01), (*** p<0.001)*

Diversity and Inclusion in the Workplace

Although there is a slight gap (d=1%, p<0.001) between the perceptions of male (82%) and female (83%) respondents in relation to their organization's efforts to create a climate supportive of all individuals, there is a larger gap between the perceptions of visible minority (77%) and white/Caucasian (84%) respondents (d=7%, p<0.001). Visible minority respondents (24%), more than white/Caucasian respondents (9%), agree that their organization devotes too little resources to diversity programs (d=15%, p<0.001). When asked if their senior management demonstrate a strong commitment to cultural diversity, 57% of white/Caucasians agreed, while only 41% of visible minorities agreed with the statement (d=17, p<0.001).

Table 3: Diversity and Inclusion in the Workplace Questions Responses of White/Caucasian and Visible Minority Respondents

	White/ Caucasian		Visible Minority		Gender	Visible Minority	
	Female	Male	Female	Male	Difference	Minority Difference	
My organization strives to create a climate supportive of all individuals.	70%	74%	68%	66%	1%***	7%***	
My organization devotes too little resources to diversity programs.	9%	6%	18%	19%	2%	15%***	
My senior management demonstrates a strong commitment to cultural diversity.	44%	48%	31%	36%	0%***	17%***	

T-test significant at (p<0.05), (** p<0.01), (*** p<0.001)*

As can be seen in Table 4 below, 57% of both white/Caucasians and visible minorities indicated no knowledge of programs, policies and practices that support the attraction, retention, development, or advancement of visible minorities in their organizations. Of those who indicated knowledge of such programs, there was very little difference between the perceptions of male and female respondents, although there was a significant difference between the responses of visible minority and white/Caucasian respondents (d=1%, p<0.01 & d=29%, p<0.001, respectively).

	White/ C	aucasian	Visible Minority			
	Female	Male	Female	Male		
Yes	36%	40%	24%	26%		
No	5%	5%	17%	18%		
Don't Know	59%	55%	59%	55%		
Total	100%	100%	100%	100%		

Table 4: Perceived Presence of Orga	nizational Programs.	Policies and Practices
Tuble 4.1 creet/cu i resence of Orge	inizational i rograms,	I oncies and I factices

Pearson Chi-Square Significance < 0.01.

Attainment and Recognition of Education Credentials

While there is a 9% difference (p<0.001) between the number of university educated males (54%) and females (45%), there is an even greater difference between white/Caucasian (45%) and visible minority (64%) respondents (d=18%, p<0.001).

	White/ Caucasian		Visible Minority	
	Female	Male	Female	Male
Less than high school	0%	0%	0%	0%
High school	23%	13%	12%	5%
College certificate/diploma	30%	33%	25%	21%
Bachelor's degree	34%	37%	42%	43%
Masters degree	8%	11%	13%	23%
PhD	0%	0%	0%	1%
Other professional degree/designation	5%	5%	7%	6%
Total	100%	100%	100%	100%

Table 5: Education of Visible Minorities and White/Caucasians

Pearson Chi-Square Significance < 0.01.

In addition, 3% of white/Caucasian respondents and 24% of visible minority respondents earned at least some of their education outside of the United States, Canada, Australia, New Zealand, France, Germany or the United Kingdom (d=21%, p<0.001). Of these respondents, 44% of visible minorities and 25% of white/Caucasians believe that their education/credentials are recognized as being less than their Canadian equivalent (d=19%, p<0.001). Forty two percent of visible minority respondents, in contrast to 27% of white/Caucasian respondents, feel that their education and training were under-utilized in their current job (d=15%, p<0.001). Of the foreign educated/credentialed, 40% feel that their education and training have been underutilized, compared to the 28% of respondents without foreign education or credentials (d=12%, p<0.001).

Table 6: Perceived Acceptance of Foreign Education/Credentials by Employers, of White/Caucasians and Visible Minorities

	White/ C	White/ Caucasian		Minority
	Female	Male	Female	Male
Less than Canadian equivalency	23%	25%	37%	47%
Canadian equivalency	68%	75%	61%	51%
More than Canadian equivalency	9%	0%	2%	2%
Total	100%	100%	100%	100%

Pearson Chi-Square Significance < 0.01.

Recognition of foreign credentials is one of the biggest barriers identified by respondents in the study, as can be seen in Table 6 above, as 39% of respondents deemed their credentials to be recognized as less than the Canadian equivalent.

ANALYSIS

While the results of the survey show that white/Caucasian women are slightly less satisfied than white/Caucasian men, the biggest variance is found in comparing white/Caucasian and visible minority respondents. As this is a survey of professionals who have been in the sector for an average of 10 years, survivor bias is an issue. That is, the respondents are women and visible minorities who have persevered in spite of the barriers that they face. The survey findings indicate that there are significant differences between the perceptions of white/Caucasian employees and visible minority employees and to a lesser extent, between male and female employee respondents.

Specifically, we found

- 1) Visible minorities show less organizational commitment than white/Caucasian employees in Canadian ICT firms. There is also a gap between male and female respondents but it is smaller.
- 2) Visible minorities show less career satisfaction than white/Caucasian employees in Canadian ICT firms. There is also a gap between male and female respondents but it is smaller.
- 3) Visible minorities show less favourable perceptions of their relationship with managers and colleagues than white/Caucasian employees in Canadian ICT firms. There is also a gap between male and female respondents but it is smaller.
- 4) Visible minorities show less favourable perceptions of career advancement and development than white/Caucasian employees in Canadian ICT firms believing that it's "who you know, not what you know" and that "people tend to recommend people of their own ethnicity for high visibility assignments". There is also a gap between male and female respondents but it is smaller.
- 5) Visible minorities show less favourable perceptions of diversity and inclusion practices than white/Caucasian employees in Canadian ICT firms. There is also a gap between male and female respondents but it is smaller.
- 6) Visible minorities perceive that their educational attainment is less valued than white/Caucasian employees in Canadian ICT firms. There is also a gap between male and female respondents but it is smaller.

The fact that these gaps were significantly greater between visible minorities and white/Caucasians, than between female respondents and male respondents may suggest differences in expectations, or that the barriers to visible minorities are greater. Not surprisingly, white/Caucasian respondents appear to be less aware of these issues.

DISCUSSION

In light of the labour market shortage, our findings are cause for concern for employers. Since employees' workplace perceptions have been linked to increased profitability and decreased employee turnover, they are important for employers to be aware of. Like employers who have examined employees' objective measures in the past to identify gaps and implement equity and/or diversity initiatives and policies to fix them, this paper has examined employees' subjective workplace perceptions to identify gaps and suggest diversity initiatives and/or policies to address them.

Initiatives to Promote Diversity in the Canadian Workforce

Although this paper identified a gap in the perceptions of visible minorities and women compared to white/Caucasian and male employees, initiatives to promote diversity are increasing in numbers. For example, the Multilingual Orientation Service Association for Immigrant Communities (MOSAIC) funded by Service Canada offers support for immigrants and non-English speaking citizens in the greater Vancouver area. MOSAIC offers programs for both employers and job seekers, offering programs such as pre-screened applications, practicum placements, free postings and direct referral to employers to make their employee such munch easier. They also offer employment assistant services, skilled immigrant assistance and skills training to job seekers (MOSAIC, 2009). There are also programs sponsored by businesses such as Toronto Region Immigrant Employment Council (TRIEC) which is sponsored in part by the Royal Bank of Canada (RBC) and Toronto Dominion (TD) bank. TRIEC offers skilled immigrants an avenue for finding work in their field of interest (TRIEC, 2006)

As well as the increased number of initiatives and programs for diversity, there has also been an increase in the number of companies implementing and promoting diversity practices. Prime examples of such companies include Nortel and EDS. At Nortel the belief is that "a wealth of innovative ideas arises from a diverse workforce", while also ensuring that their management training includes diversity and equity compliance (Nortel, 2009). Similarly, the philosophy on diversity at EDS

is that "the diversity of our people is what makes EDS different – and the things that make us different make us better" (EDS, 2009).

Implications: Towards an Integrated Approach

Given the gaps in workplace perceptions between visible minority and white/Caucasian employees and men and women employees identified in this paper, we suggest that the 'ecological model' of change be used as a framework to guide the development of future diversity initiatives. The ecological model of change is a model, adopted from public health (McLeroy et al., 1988), that considers the complex interactions among individual factors, group factors, organizational factors and societal factors which shape choices, create barriers and facilitate opportunities. Due to the lack of research on institutional environments of organizations and the larger socio political-context of organizations we believe that future efforts must address factors at the individual, organizational and societal levels.

At the individual level, focused programs aimed at equipping members of under-represented groups, with the knowledge, skills and attitudes that will increase their chances of success are essential. Within respect to this paper, critical issues for employees include:

- Supportive relationships with managers and colleagues;
- Open and transparent recruitment and promotion policies;
- Organizational support for diversity;
- Senior executive support for diversity;
- Utilization of skills; and
- Recognition of foreign credentials.

At the societal level, better policies and programs are needed to support visible minorities, women and other underrepresented groups. But more importantly perhaps, vigilance is needed to address the stereotypes and hidden barriers that limit both aspirations and opportunities.

CONCLUSION

Our study found differences between visible minority and white/Caucasian employees' subjective workplace perceptions and men and women employees' subjective workplace perceptions. In light of the skills shortage issues, organizations may consider implementing diversity initiatives to improve their employees' perceptions, and thus business outcomes. Given the differences between the groups examined in this paper, in addition to the literature that found effective diversity initiatives to increase profitability and decrease turnover, and in-effective diversity initiatives to have negative effects on organizations however; diversity initiatives need to be tailored. To assist in this effort, this paper has provided some diversity initiative examples, and proposed the adoption of the 'ecological model' of change that if considered, could enable a more diverse and profitable business.

REFERENCES

- 1. Allen, D. and Griffeth, R. (1997) Vertical and lateral information processing: the effects of gender, employee classification level, and media richness on communication and work outcomes, *Human Relations*, 50, 10, 1239-1260.
- 2. Blau, F.D. and Kahn, L.M. (1992) The gender earnings gap: learning from international comparisons, *The American Economic Review*, 82, 2, 533-538.
- 3. Boisvert, S. (2007) Workforce shortages in the IT sector: Bell establishes coalition to ensure the next generation of IT resources. Retrieved on February 18, 2009 from http://www.bce.ca/en/news/releases/be/2007/12/04/74551.html
- 4. Catalyst and The Diversity Institute, Ryerson University (2007) Career advancement in corporate Canada: a focus on visible minorities~An early preview. Toronto, Catalyst and Ryerson University. Retrieved March 17, 2009 from http://www.ryerson.ca/tedrogersschool/news/archive/FINAL%20preview%20Catalyst-Ryerson.pdf
- 5. CBC (Canadian Broadcasting Corporation) (2007) Survey reveals "sobering" IT skills shortage. *CBC News*, July 16, viewed October 29, 2008, http://www.cbc.ca/technology/story/2007/07/16/skills-shortage.html
- 6. Cox, T.H. and Nkomo, S.M. (1991) A race and gender-group analysis of the early career experience of MBAs, *Work and Occupations*, 18, 4, 431-447.

- Donovan, M.A., Drasgow, F. and Munson, L.J. (1998) The perceptions of fair interpersonal treatment scale: Development and validation of a measure of interpersonal treatment in the workplace. *Journal of Applied Psychology*, <u>83</u>, 683-692.
- 8. EDS (2009) Employee diversity. Retrieved on April 17, 2009 from http://www.en.eds.ca/nlapps/docs/default.asp?fid=21
- 9. Ensher, A.E., Grant-Vallone, E.J. and Donaldson, S.I. (2001) Effects of perceived discrimination on job satisfaction, organizational commitment, organizational citizenship behavior and grievances, *Human Resource Development Quarterly*, 12, 1, 53-72.
- 10. Greenhaus, J.H., Parasuraman, S. and Wormley, W.M. (1990) Effects of race on organizational experiences, job performance evaluations and career outcomes, *Academy of Management Journal*, 33, 1, 64-86.
- 11. Harter, J.K., Schmidt, F.L. and Hayes, T.L. (2002) Business-unit level relationship between employee satisfaction, employee engagement and business outcomes, *Journal of Applied Psychology*, 87, 2, 268-279.
- 12. Hood, J.N. (2003) The relationship of leadership style and CEO values to ethical practices in organizations, *Journal of Business Ethics*, 43, 4, 263-273.
- 13. HRSDC (Human Resources and Skills Development Canada) (2005) Visible minorities and aboriginal peoples in Vancouver's labour market. Retrieved October 6, 2008 from http://www.hrsdc.gc.ca/eng/lp/lo/lswe/we/special_projects/RacismFreeInitiative/Pendakur.shtml
- 14. Hum, D. and Simpson, W. (1999) Wage opportunities for visible minorities in Canada, *Canadian Public Policy*, 25, 3, 379-394.
- 15. Igbaria, M. and Wormley, W.M. (1992) Organizational experiences and career success of MIS professionals and managers: An examination of race differences, *MIS Quarterly*, 16, 4, 507-529.
- 16. Igbaria, M. and Wormley, W.M. (1995) Race differences in job performance and career success, *Communications of the ACM*, 38,3, 82-92.
- 17. Information and Communications Technology Council (ICTC) (2008) Outlook for the Information and Communications Technology labour market, Ottawa, ICTC.
- 18. Jolke, M., Stamper, C. and Shoemaker, M. (2002) Antecedents to boundary-spanner perceived organizational support, *Journal of Managerial Psychology*, 17, 2, 116-228.
- 19. Kochan, T., Bezrukova, K., Ely, R., Jackson, S., Joshi, A., Jehn, K., Leonard, J., Levine, D. and Thomas, D. (2003) The effects of diversity on business performance: Report of the diversity research network, *Human Resource Management*, 42, 3-21.
- 20. Kulik, C.T., Pepper, M.B., Roberson, L., and Parker, S.K. (2007) The rich get richer: Predicting participation in voluntary diversity training. *Journal of Organizational Behavior*, 28, 753-769.
- 21. Marsden, P.V., Kalleberg, A.L. and Cook, C.R. (1993), Gender differences in organizational commitment, *Work and Occupations*, 20, 3, 368-390.
- 22. McLeroy, K.R., Bibeau, D., Steckler, A. and Glanz, K. (1988) An ecological perspective on health promotion programs, *Health Education Quarterly*, 15, 4, 351-77.
- 23. Mowday, R.T., Steers, R.M., and Porter. L.W. (1979) The measurement of organizational commitment, *Journal of Vocational Behavior*, 14, 224-247.
- 24. Multilingual Orientation Service Association for Immigrant Communities (MOSAIC) (2009) Programs and services. Retrieved on April 17, 2009 from http://www.mosaicbc.com/programs.asp
- 25. Nortel (2009) Diversity @ Nortel. Retrieved on April 17, 2009 from http://www.nortel.com/employment/life_at_nn/diversity.html
- 26. Palameta, B. (2004) Low income among immigrants and visible minorities, *Perspectives*, 5, 4, 12-17.
- 27. Pendakur, K. and Pendakur, R. (1998) The colour of money: earnings differentials among ethnic groups in Canada, *Canadian Journal of Economics*, 31, 3, 518-548.
- 28. Ranson, G. and Reeves, W.J. (1996) Gender earnings, and proportions of women, Gender and Society, 10, 2, 168-184.
- 29. Reitz, J.G. (2001) Immigrant skill utilization in the Canadian labour market: implications of human capital research, *Journal of International Migration and Integration*, 2, 3, 347-378.

- 30. Reitz, J.G. (2007) Immigrants employment success in Canada, part II: understanding the decline, *Journal of International Migration and Integration*, 8, 1, 37-62.
- 31. Richard, O.C. (2000) Racial diversity, business strategy, and firm performance: a resource-based view. Academy of Management Journal, 43, 2, 164-177.
- 32. Richard, O.C. and Munthi, K.I. (2008) The impact of racial diversity on intermediate and long-term performance: the moderating role of environmental context, *Strategic Management Journal*, 28, 12, 1213-1233.
- 33. Schneer, J.A. and Reitman, F. (1994) The importance of gender in mid-career: a longitudinal study of MBAs, *Journal of Organizational Behavior*, 15, 3, 199-207.
- 34. Sippola, A. (2007) Developing culturally diverse organizations: a participative and empowerment-based method, *Women in Management Review*, 22, 4, 253-273.
- 35. Toronto Regional Employment Immigration Council (TRIEC) (2006) Career Bridge. Toronto, TRIEC.
- 36. Webster, J. (2007) Diversity management in the ICT industry: challenges and issues for social dialogue. Report prepared for Union Network International, Retrieved March 17, 2009 from <u>http://www.emf-fem.org/content/download/16930/180324/file/ReportFinal_DiscPaper_vers2_en.pdf</u>
- 37. Wentling, R.M. and Palma-Rivas, N. (1998) Current status and future trends of diversity initiatives in the workplace: diversity experts' perspectives, *Human Resource Development Quarterly*, 9, 3, 235-253.
- 38. Wentling, R.M. and Palma-Rivas, N. (2000) Current status of diversity initiatives in selected multinational corporations, *Human Resource Development Quarterly*, 11, 1, 35-60.