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SEVEN TO ONE? CUSTOMER SERVICE IN ENTREPRENEURIAL HEALTHCARE ORGANIZATIONS

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ABSTRACT

It has been said that it takes positive experiences to make up for one negative experience within an organization. In this paper we examine this within entrepreneurial healthcare organizations. We also examined the importance of networking and customer focus (customer service, pricing, quality, promotional strategies) and found that quality was the most important of these factors to customers followed by customer service, pricing, and promotional strategies. When problems in quality were observed it typically took over 16 positive experiences to make up for it - if it was possible to make up for it while at the other extreme promotional mistakes seemed to be expected and took just one positive experience to make up for it.

REFERENCES

- Buckley, M., Fedor, D., Carraher, S., Frink, D., & Marvin, D. (1997). The ethical obligation to provide recruits realistic job previews. *Journal of Managerial Issues*, 9 (4), 468-484.
- Budd, J. & Carraher, S. (1998). Validation of an inventory to measure attributes of strategic management. *Psychological Reports*, <u>82</u> (3 Pt 2), 1220-1222.
- Carland, J. & Carland, J. (1993). The role of personality in new venture creation. *Entrepreneurship, Innovation and Change*, 2(2), 129-141.
- Carland, J & Carland, J. (1995). The case of the reluctant client. *Journal of the International Academy for Case Studies*, 1(2), 76-79.
- Carland, J. & Carland, J. (1997). A model of potential entrepreneurship: Profiles and educational implications. *Journal of Small Business Strategy*, 8 (1), 1-13.
- Carland, J. & Carland, J. (2003). Pawn takes queen: The strategic gameboard in entrepreneurial firms. *Academy of Strategic Management Journal*, 2, 93-104.
- Carland, J. & Carland, J. (2004). Economic development: Changing the policy to support entrepreneurship. *Academy of Entrepreneurship Journal*, 10(2), 104-114.
- Carland, J. & Carland, J. (2006). Eminent domain: What happens when the state takes part of your land? *The Entrepreneurial Executive*, 11, 95-113.
- Carland, J.A.C., & Carland, J.W. (1991). An empirical investigation into the distinctions between male and female entrepreneurs managers. *International Small Business Journal*, 9 (3), 62-72.
- Carland, J.A., Carland, J.W., & Stewart, W.H. (1996). Seeing what's not there: The enigma of entrepreneurship. Journal of Small Business Strategy 7 (1), 1-20.
- Carland, J., Carland, J.A., & Abhy, C. (1989). An assessment of the psychological determinants of planning in small businesses. *International Small Business Journal*, 23-34.

- Carland, J., Carland, J., & Carland, J. (1995). Self-actualization: The zenith of entrepreneurship. *Journal of Small Business Strategy*, 30-39.
- Carland, J.W., Carland, J.A., & Hoy, F. (1992). An entrepreneurship index: An empirical validation. Babson Entrepreneurship Conference, Fontainebleau, France.
- Carland, J.W., Carland, J.A., Hoy, F., & Boulton, W.R. (1988). Distinctions between entrepreneurial and small business ventures. *International Journal of Management*, 5 (1), 98-103.
- Carland, J.W. III, Carland, J.W., Carland, J.A., & Pearce, J.W. (1995). Risk taking propensity among entrepreneurs, small business owners and managers. *Journal of Business and Entrepreneurship*, 7 (1), 12-23.
- Carland, J.W., Hoy, F., Boulton, W.R., & Carland, J.A.C. (1984). Differentiating entrepreneurs from small business owners: A conceptualization. *Academy of Management Review*, 9 (2), 354-359.
- Carland, J.W., Hoy, F., & Carland, J.A.C. (1988). Who is an entrepreneur? is the wrong question. *American Journal of Small Business*, 12 (4), 33-39.
- Carraher, S.M. (1991). A validity study of the pay satisfaction questionnaire (PSQ). *Educational and Psychological Measurement*, 51, 491-495.
- Carraher, S.M. (1991). On the dimensionality of the pay satisfaction questionnaire. *Psychological Reports*, 69, 887-890.
- Carraher, S. (1993). Another look at the dimensionality of a learning style questionnaire. *Educational and Psychological Measurement*, 53 (2), 411-415.
- Carraher, S. (1995). On the dimensionality of a learning style questionnaire. Psychological Reports, 77 (1), 19-23.
- Carraher, S.M. (2003). The father of cross-cultural research: An interview with Geert Hofstede. *Journal of Applied Management & Entrepreneurship*, 8 (2), 97-106.
- Carraher, S.M. (2005). An Examination of entrepreneurial orientation: A validation study in 68 countries in Africa, Asia, Europe, and North America. *International Journal of Family Business*, 2 (1), 95-100.
- Carraher, S.M. (2006). Attitude towards benefits among SME owners in Eastern Europe: A 30-month study. *Global Business and Finance Review*, 11 (1), 41-48.
- Carraher, S.M. (2008). Using E-Bay to teach global and technological entrepreneurship. *International Journal of Family Business*, 5 (1), 63-64.
- Carraher, S.M. (2011). Turnover prediction using attitudes towards benefits, pay, and pay satisfaction among employees and entrepreneurs in Estonia, Latvia, & Lithuania. *Baltic Journal of Management*, <u>6</u>(1), 25-52.
- Carraher, S.M., Buchanan, J.K., & Puia, G. (2010). Entrepreneurial Need for Achievement in China, Latvia, and the USA. *Baltic Journal of Management*, <u>5</u> (3), 378-396.
- Carraher, S.M. & Buckley, M. R. (1996). Cognitive complexity and the perceived dimensionality of pay satisfaction. *Journal of Applied Psychology*, 81 (1), 102-109.
- Carraher, S.M. & Buckley, M.R. (2008). Attitudes towards benefits and behavioral intentions and their relationship to Absenteeism, Performance, and Turnover among nurses. *Academy of Health Care Management Journal*, <u>4</u> (2), 89-109.
- Carraher, S.M., Buckley, M.R., & Carraher, C. (2002). Cognitive complexity with employees from entrepreneurial financial information service organizations and educational institutions: An extension & replication looking at pay, benefits, and leadership. *Academy of Strategic Management Journal*, 1, 43-56.
- Carraher, S.M., Buckley, M. & Cote, J. (1999). Multitrait-multimethod information management: Global strategic analysis issues. *Global Business & Finance Review*, 4 (2), 29-36.
- Carraher, S.M., Buckley, M., & Cote, J. (2000). Strategic entrepreneurialism in analysis: Global problems in research. *Global Business & Finance Review*, 5 (2), 77-86.
- Carraher, S.M., Buckley, M., Scott., C., Parnell, J., & Carraher, C. (2002). Customer service selection in a global entrepreneurial information services organization. *Journal of Applied Management and Entrepreneurship*, 7 (2), 45-55.
- Carraher, S.M. & Carraher, C. (1996). ISO environmental management standards: ISO 14,000. *Polymer News*, 21, 167-169.
- Carraher, S.M. & Carraher, C. (1996). ISO 9000. Polymer News, 21, 21-24.

- Carraher, S.M. & Carraher, S.C. (2006). Human resource issues among SME's in Eastern Europe: A 30 month study in Belarus, Poland, and Ukraine. *International Journal of Entrepreneurship*. 10, 97-108.
- Carraher, S.M., Carraher, S.C., & Mintu-Wimsatt, A. (2005). Customer service management in Western and Central Europe: A concurrent validation strategy in entrepreneurial financial information services organizations. *Journal of Business Strategies*, 22, 41-54.
- Carraher, S.M., Carraher, S.C., & Whitely, W. (2003). Global entrepreneurship, income, and work norms: A seven country study. *Academy of Entrepreneurship Journal*, 9, 31-42.
- Carraher, S.M., Hart, D., & Carraher, C. (2003). Attitudes towards benefits among entrepreneurial employees. *Personnel Review*, 32 (6), 683-693.
- Carraher, S.M., Gibson, J. W., & Buckley, M.R. (2006). Compensation satisfaction in the Baltics and the USA. *Baltic Journal of Management*, 1 (1), 7-23.
- Carraher, S.M., Mendoza, J, Buckley, M, Schoenfeldt, L & Carraher, C. (1998). Validation of an instrument to measure service orientation. *Journal of Quality Management*, 3, 211-224.
- Carraher, S.M. & Michael, K. (1999). An examination of the dimensionality of the Vengeance Scale in an entrepreneurial multinational organization. *Psychological Reports*, 85 (2), 687-688.
- Carraher, S.M. & Parnell, J. (2008). Customer service during peak (in season) and non-peak (off season) times: A multi-country (Austria, Switzerland, United Kingdom and United States) examination of entrepreneurial tourist focused core personnel. *International Journal of Entrepreneurship*, 12, 39-56.
- Carraher, S.M., Parnell, J., Carraher, S.C., Carraher, C., & Sullivan, S. (2006). Customer service, entrepreneurial orientation, and performance: A study in health care organizations in Hong Kong, Italy, New Zealand, the United Kingdom, and the USA. *Journal of Applied Management & Entrepreneurship*, 11 (4), 33-48.
- Carraher, S.M., Parnell, J., & Spillan, J. (2009). Customer service-orientation of small retail business owners in Austria, the Czech Republic, Hungary, Latvia, Slovakia, and Slovenia. *Baltic Journal of Management*, 4 (3), 251-268.
- Carraher, S.M. & Paridon, T. (2008/2009). Entrepreneurship journal rankings across the discipline. *Journal of Small Business Strategy*, 19 (2), 89-98.
- Carraher, S.M., Scott, C., & Carraher, S.C. (2004). A comparison of polychronicity levels among small business owners and non business owners in the U.S., China, Ukraine, Poland, Hungary, Bulgaria, and Mexico. *International Journal of Family Business*, 1 (1), 97-101.
- Carraher, S.M. & Sullivan, S. (2003). Employees' contributions to quality: An examination of the Service Orientation Index within entrepreneurial organizations. *Global Business & Finance Review*, 8 (1) 103-110.
- Carraher, S.M., Sullivan, S. & Carraher, S.C. (2005). An examination of the stress experience by entrepreneurial expatriate health care professionals working in Benin, Bolivia, Burkina Faso, Ethiopia, Ghana, Niger, Nigeria, Paraguay, South Africa, and Zambia. *International Journal of Entrepreneurship*, 9, 45-66.
- Carraher, S.M., Sullivan, S.E., & Crocitto, M. (2008). Mentoring across global boundaries: An empirical examination of home- and host-country mentors on expatriate career outcomes. *Journal of International Business Studies*, 39 (8), 1310-1326.
- Carraher, S.M. & Welsh, D.H.B. (2009). Global Entrepreneurship. Dubuque, IA: Kendall Hunt Publishing.
- Carraher, S.M. & Whitely, W.T. (1998). Motivations for work and their influence on pay across six countries. *Global Business and Finance Review*, 3, 49-56.
- Carraher, S.M., Yuyuenyongwatana, R., Sadler, T., & Baird, T. (2009). Polychronicity, leadership, and language influences among European nurses: Social differences in accounting and finances, *International Journal of Family Business*, <u>6</u>(1), 35-43.
- Chait, H., Carraher, S.M., & Buckley, M. (2000). Measuring service orientation with biodata. *Journal of Managerial Issues*, 12, 109-120.
- Crocitto, M., Sullivan, S.E. & Carraher, S.M. (2005). Global mentoring as a means of career development and knowledge creation: A learning based framework and agenda for future research. *Career Development International*, 10 (6/7), 522-535.
- Deng, F.J., Huang, L.Y., Carraher, S.M., & Duan, J. (2009). International expansion of family firms: An integrative framework using Taiwanese manufacturers. *Academy of Entrepreneurship Journal*, 15 (1), 25-42.

- Hart, D. & Carraher, S. (1995). The development of an instrument to measure attitudes towards benefits. *Educational and Psychological Measurement*, 55 (3), 498-502.
- Huang, L.Y. & Carraher, S. (2004). How effective are expatriate management and guanxi networks: Evidence from Chinese Industries. *International Journal of Family Business*, 1 (1), 1-23.
- Lester, D., Parnell, J.A. & Carraher, S.M. (2010). Assessing the desktop manager. *Journal of Management Development*, 29 (3), 246-264.
- Lockwood, F., Teasley, R., Carland, J.A.C., & Carland, J.W. (2006). An examination of the power of the dark side of entrepreneurship. *International Journal of Family Business*, 3, 1-20.
- Paridon, T. & Carraher, S.M. (2009). Entrepreneurial marketing: Customer shopping value and patronage behavior. *Journal of Applied Management & Entrepreneurship*, 14 (2), 3-28.
- Paridon, T., Carraher, S.M., & Carraher, S.C. (2006). The income effect in personal shopping value, consumer selfconfidence, and information sharing (word of mouth communication) research. Academy of Marketing Studies Journal, 10 (2), 107-124.
- Parnell, J. & Carraher, S. (2003). The Management Education by Internet Readiness (MEBIR) scale: Developing a scale to assess one's propensity for Internet-mediated management education. *Journal of Management Education*, 27, 431-446.
- Scarpello, V. & Carraher, S. M. (2008). Are pay satisfaction and pay fairness the same construct? A cross country examination among the self-employed in Latvia, Germany, the U.K., and the U.S.A. *Baltic Journal of Management*, 3 (1), 23-39.
- Sethi, V. & Carraher, S.M. (1993). Developing measures for assessing the organizational impact of information technology: A comment on Mahmood & Soon's paper. *Decision Science*, 24, 867-877.
- Stewart, W., Watson, W., Carland, J.C., & Carland, J.W. (1999). A proclivity for entrepreneurship: A comparison of entrepreneurs, small business owners, and corporate managers. *Journal of Business Venturing*, 14, 189-214.
- Sturman, M.C. & Carraher, S.M. (2007). Using a Random-effects model to test differing conceptualizations of multidimensional constructs. *Organizational Research Methods*, 10 (1), 108-135.
- Sullivan, S.E., Forret, M., Carraher, S.M., & Mainiero, L. (2009). Using the kaleidoscope career model to examine generational differences in work attitudes. *Career Development International*, 14 (3), 284-302.
- Welsh, D. & Carraher, S.M. (2011). Case Studies in Global Entrepreneurship. Kendall Hunt P.
- Williams, M.L., Brower, H.H., Ford, L.R., Williams, L.J., & Carraher, S.M. (2008). A comprehensive model and measure of compensation satisfaction. *Journal of Occupational and Organizational Psychology*, 81 (4), 639-668.

THE USE OF MARKETING TOOLS TO INCREASE THE RATE OF EARLY REFERRAL TO PHYSICIANS OF CHILDREN WITH DEVELOPMENTAL AND BEHAVIORAL DISORDERS

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ABSTRACT

The problem of developmental and behavioral disorders affects approximately 17% of American children. Early recognition of these disorders is prerequisite to the improvement of outcomes and cost effective care. It is known that less than half of these affected children are identified before entering school. In Luzerne County, referrals to early intervention by parents and clinicians are made at much higher rate for children over 3 years old. Clearly most referrals should be made well before this age for optimal intervention and outcome.

This study attempts to increase awareness of proper childhood development, developmental delays and improve the referral of young children with developmental and behavioral disorders in Luzerne County, Pennsylvania. In order to accomplish this goal a marketing plan was developed and implemented by a community task force to improve referrals at an early age. This marketing plan included a promotional campaign developed and implemented by a group of local pediatricians in the county.

Public service announcements (PSA) were developed and disseminated in local media using celebrities familiar to the target population to communicate the message of the need for increased awareness of potential problems in childhood development. All local media agreed to run the PSA's and additionally, the PSAs were placed in daycare centers and places that support young children's programs. This promotional campaign also focused on making local physicians aware of the magnitude of this problem in Luzerne County.

This program has substantially increased referrals to early Intervention programs. The community group is planning to add additional marketing strategies to the program in an attempt to continue to increase awareness of the need for early referral to medical care for young children with developmental disabilities in Luzerne County.

INTRODUCTION

The word disability means different things to different people. The World Health Organization (2007) points out that a disability is part of a continuum involving impairment, disability and handicap. Morrow-Gorton (2010) argues that developmental disabilities consist of two broad categories: developmental disabilities and acquired ones. These disabilities occur in the developmental period of life involving learning or cognition, movement or behavior. These disabilities usually include: cerebral palsy, intellectual disabilities, learning disabilities, autism,

and attention disorders. According to the Centers for Disease Control and Prevention (CDC) (2010) developmental disabilities consist of a number of severe chronic conditions that result from various mental and physical impairments. These developmental disabilities usually cause difficulty with activities like learning, mobility, language, self-help and independent living. Individuals with developmental disabilities can lead healthy lives if these problems are discovered at an early age and appropriate help is available. Unfortunately, in many parts of our country, developmental disabilities are not recognized at an early age making their treatment less successful then it could be if discovered and referred to medical care at an early age.

A developmental disability, according to the Developmental Disabilities Assistance and Bill of Rights Act, is defined as a severe, chronic disability which: originated at birth or during childhood, is expected to continue indefinitely, and substantially restricts the individuals functioning in several major life activities. According to Boyle, Decoufle, & Yeargin-Allsopp (1994) seventeen percent of children in this country have been reported to have experienced a developmental disability causing a substantial impact on the health and learning ability of those children affected. Their research shows that developmental disabilities have a tremendous negative impact on children's health and educational functioning and the impact can be different depending on the type of disability. Learning disabilities has been shown to have the most profound effect on school performance.

Early diagnosis and intervention with these disabilities can usually result in successful outcomes for the child. Rosenberg, Zhang, & Robinson (2008) argue that because of the low participation rate of children in medical care for developmental disabilities that a concerted intervention is required to get children with these disabilities at an early age. This is certainly not an easy task because awareness of the importance of early referral of these children is very low in most communities. According to Sices, Feudtner, McLaughlin, Drotar, & Williams (2004) there is a need for targeted educational programs for health care providers and parents. The key is for early referral of children to the services they require in order to reduce the effects of the disability. Head & Abbeduto (2007) point out that three goals need to be achieved when there is concern over development in children. These goals involve: diagnosis of the disability, intervention by medical providers and evaluation of the progress of the intervention.

METHODOLOGY

This study began in May 2007 and attempted to increase awareness of the problems associated with developmental and behavioral disorders in young children in Northeastern Pennsylvania. A secondary purpose of this study was to determine if a group of community volunteers could improve awareness and early referral of children under three years of age to medical care. Developmental and behavioral disabilities for this study were defined as children exhibiting abnormalities involving speech, cognitive, fine motor or gross motor development. The volunteers included pediatricians, family practice physicians, representatives from media outlets and a number of community leaders from Luzerne County.

In order to accomplish this goal the tools of marketing were utilized to improve the chances of success in this venture. This marketing approach included a marketing plan

developed and implemented by a group of local pediatricians in the county. According to Berkowitz (2011) marketing involves a focus on the consumer utilizing various skills to improve consumer satisfaction with a given product or service. The marketer uses the marketing mix also called the four Ps that include product, price, place and promotion to define the marketing strategy. The marketing goal for this particular venture was to increase the awareness of the need for early intervention by medical specialists in those with developmental disabilities. The marketing mix variable chosen for use in this project was promotion.

Promotional strategies usually involve one or more of the communication techniques utilized by marketers that include: advertising, personal selling, publicity and sales promotion. Publicity is the most utilized form of promotion in marketing health care services. According to Berkowitz (2011) publicity is usually directed through the public relations department and is chosen by health care organizations because of its great credibility. The director of the publicity campaign develops a news story and then encourages the media to run the story. One way of publicizing something is to utilize a Public Service Announcement (PSA). The PSA is generally intended to change the public interest by increasing awareness of the general public about the topic under consideration.

Since this group of volunteers had limited resources but did have media volunteers in their group it was decided to develop PSAs to achieve the objectives of the project. Local celebrities were recruited to utilize tailored messages concerning the prevalence of children with behavioral and developmental disabilities in Luzerne County and the need to get these children to medical care as early as possible. These PSAs were printed flyers that were used to inform the residents of county about the signs of these behavioral and developmental problems found in young children along with a method of referral to appropriate medical care. These informational packages utilized local media, sports and medical celebrities to present the information to the specific age groups of the population that would relate to these celebrities.

The objective of this project was to increase the awareness of parents and physicians of developmental disabilities including signs and symptoms and the need to get the affected child to medical care as soon as possible. Public service announcements (PSA) were developed and disseminated in local media using celebrities familiar to the target population to communicate the message of the need for increased awareness of childhood development. All local media agreed to run the PSA's and the PSAs were placed in daycare centers and places that support children's programs. The PSA was also displayed on local buses visible to residents. Education of clinicians was also included on developmental screening and referral for early intervention.

RESULTS

The problem of a high prevalence of children residing in Luzerne County with developmental and behavioral disabilities was identified by a local pediatric practice. These children with disabilities were apparently being missed for diagnosis and intervention by parents and medical care practices in northeastern Pennsylvania. A task force was organized to deal with the problem and it was decided to utilize a marketing approach to increase the awareness of this

problem by potential referral sources throughout the county. The marketing approach to solving this very serious health problem was launched in late 2007.

This program has substantially increased referrals to early intervention program as shown in Table 1. The number of infant and toddlers experiencing developmental and behavioral problems that were referred to medical care increased by 47 in 2008, by 19 in 2009 and by 36 last year and is continuing to increase this year.

Table 1: Preschool Referrals					
Fiscal/School Year	Aggregate Count	Infant/Toddler Referred Students	Students from other than I/T referrals	# Students with Dx of Developmental	
July 1-June 30 2005-06	778	112	666	Delay 372	
2006-07	782	105	677	392	
2007-08	952	152	800	476	
2008-09	980	171	809	490	
2009-10	993	207	786	521	
2010-11**	826**	100**	726		
** Full 2010-11 data will not be available until May 2012. The information is reflective of July 1-December 31, 2011.					

This program continues to further develop this marketing approach to a community health problem while expanding the program to neighboring counties.

DISCUSSION

The incidence of developmental and behavioral disabilities is much higher in Luzerne County than in most other counties in Pennsylvania. This problem motivated a community group to mobilize a task force of volunteers including physicians and community leaders to attempt to improve awareness of the problem and increase referrals of children with these disabilities to medical care before they reach three years of age. The interventions were successful and early reports indicate that referrals to medical care for children with developmental disabilities have increased.

The success of this project has motivated the group of volunteers to consider the development of a web site to be hosted by a local college to further increase awareness of this child health problem to a much larger percentage of the county population. This educational program will be developed on a SharePoint site at a local College. It will consist of a pre-test, followed by a ten minute educational program about the signs and symptoms of developmental and behavioral disabilities and then a post-test of knowledge gained from the education program. This educational program will consist of a series of voice-narrated power point slides utilizing a local pediatrician who will discuss the signs and symptoms of these disabilities in children under the age of three and the need for early referral to medical care of these young children.

REFERENCES

- Berkowitz, E.N. (2011). *Essentials of health care marketing* (Third Edition ed.). Sudbury, Massachusetts: Jones Bartlett Publishers.
- Boyle, C.A., P. Decoufle, & M. Yeargin-Allsopp (1994). Prevalence and health impact of developmental disabilities in US children. *Pediatrics*, 93(3), 399-403.
- Centers for Disease Control and Prevention (2011). *Developmental disabilities*. Retrieved May 10, 2011, from http://www.cdc.gov/ncbddd/dd1.htm.
- Head, L.S. & L. Abbeduto (2007). Recognizing the role of parents in developmental outcomes: A systems approach to evaluating the child with developmental disabilities. *Mental Retardation and Developmental Disabilities Research Reviews*, 13, 293-301.
- Morrow-Gorton, J.D. (2010). The new world of health promotion: New program development, implementation, and evaluation. Sudbury, Massachusetts: Jones Bartlett Publishers.
- Rosenberg, S.A., D. Zhang & C.C. Robinson (2008). Prevalence of developmental delays and participation in early intervention services for young children. *Pediatrics*, *121*(1503), 1503-1509.
- Sices, L., C. Feudtner, J. McLaughlin, D. Drotar & M. Williams (2004). How do primary care physicians manage children with possible developmental delays? A national survey with an experimental design. *113*(274), 274-282.
- World Health Organization (2007). *Disabilities*. Geneva, Switzerland. Available at http://www.who.int/topics/disabilities/en/. Accessed November 30, 2007.

THE IMPACT OF WORK-FAMILY CONFLICT ON THE INTENTION TO QUIT THE JOB IN A SAMPLE OF MEDICAL RESIDENTS

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INTRODUCTION

One important source of stress among doctors is the number of hours of work (Tattersall, Bennett and Pugh, 1999). A study on Canadian doctors as revealed that the average work quarter for doctors is 25.5 hours and that they worked a weekly average of 69 hours. On average, during a work quarter, the doctors had 1.2 hours of break (without sleep) slept on average 1.9 hours and walked 3.91 miles (Parshuram, 2004). A physician's reality is to be able to work thirty hours strait without sleep when he is the designated physician for a population of 130 000 inhabitants (Acres, 2004).

According to Sokolyk (2004), the perfect recipie for burnout among physicians is the mix of having great responsibilities concerning the patients' health and having few control over them. Aziz (2004) has measured stress levels associated to personal and work-related factors as perceived by physicians working in the United States. Results showed that, aside from the difficulties associated to working long hours, being overworked affects physicians mainly because it is associated to lack of time spent with their families. In their 2004 study, Simon and colleagues present work-family-conflict as being one of the ten most important work-related stress factors.

Work-family conflict (WFC) has been defined as a form of role conflict between workrole and family role which are incompatible in some aspects (Greenhaus and Beutell, 1985). Research has demonstrated the negative impact of work-family conflict on personal well-being, on family life and on stress levels (Parasuraman et Greenhaus, 2002; Rice et al., 1992). Boyar et al. (2005) have reported that WFC is also associated to absenteeism, causes work distractions and high costs for organizations. Many studies have presented relations between work-family conflict and job satisfaction (Bruck, Allen, Spector, 2002; Grandey, Cordeiro, Crouter, 2005) and performance at work (Yavas, Babakus & Karatepe, 2008). But another crucial impact of WFC, is on the intention of workers to leave their job (Rode, Rehg, Near, Underhill, 2007; Yavas, Babakus, Karatepe, 2008; Netermeyer, Brashear-Alejandro, Boles, 2004). Researchers come to the conclusion that work-family conflict presents an important challenge not only for the employee but for the organization and society (Duxbury et al., 1994).

In his article on work-home conflict in the European nursing profession, Simon and his colleagues (2004) have found that one of the reasons that nurses leave the profession is a high level of WFC. Other researchers have found the same link: it seems that one of the most

important reasons that employees in the health sector leave their profession is work-family conflict. (Gottlieb et al., 1996; Burke et Greenglass, 2001). To our knowledge, intention to quit the profession or intention to leave hospital setting to open a private practice has not been measured for physicians or medical students.

The objective of this study is to measure the role of WFC in the intention to leave the job in medical residents.

METHOD

Participants and procedure

The sample was composed of 50 medical residents who were then asked to fill out the questionnaire at home and to send it back by mail in the envelopes provided to them. All of the participants had passed the Canadian Medical Exam, therefore, they have the same schedules and responsibilities as regular doctors. All of the participants were working at a university centre and none of them was studying to become a family doctor, they were all in a specialized branch of medicine.

Instruments

Work-Family conflict: The instrument used for this study was adapted from a French version (Laughrea, 2000) of the work-family conflict and family-work conflict and effective experiences questionnaire (Netemeyer, Boles, & Mcmurrian, 1996). This instrument presents items measuring work-family conflict using a likert-scale ranging from (1. Strongly disagree to 5. Strongly agree). The first author has adapted the instrument to the reality of doctors and medical residents ($\alpha = .86$).

Intention to leave: Intention to leave was measured with a French adaptation of Simon, Kummerling, & Hasselhorn's (2004) instrument used in a study with a sample population of nurses. An item related to the intention to leave the medical prepossession was added to the four pre-existing items ($\alpha = .77$). The items are answered with a five point Likert scale (1-Never to 5-Every day).

Socio-demographical information: An additional questionnaire was added to gather information about the sex of participants, their marital status, the number of children at charge, their age and their title (function).

RESULTS

The participants were predominantly women (58%). Fifty percent of the participants were married or living with a partner and 50% were either single, separated, divorced or widowed. Ninety percent of the participants did not have children and ten percent reported having at least one child. Sixty four percent of the participants were born in 1980 or later; 34% were born between 1966 and 1979; and 2% (one participant) was born before 1966.

A regression analysis was conducted and revealed that a significant relation existed between WFC and intention to leave the job ($\beta = .449$, $R^2 = 0.202$, $p \le 0.001$).

DISCUSSION

Work-family conflict plays a significant role in explaining the intention to quit the job for medical residents. For the past decades, the responsibility of dealing with WFC has been attributed to the individuals. It is more than time that organizations start taking action to reduce this problem that finds its roots not only in the individuals but also in within the organizations. It is crucial to create a more flexible organizational environment that takes into account the needs of physicians. In a field where resources are scarce and where psychological well-being and satisfaction is directly linked to quality of patient care, it is crucial to understand the elements related to work satisfaction and intention to leave such as WFC. Most of all, organization need to address this issue in order to retain physicians and to attract new generations of physicians.

REFERENCES

Acres, John C.(2004). Preparing physician for the real World, Canadian Medical Association Journal, 171(7).

- Aziz, A. (2004). Sources of perceived stress among american doctors: A cross-cultural perspective. *Cross Cultural Management*, 11, 28-39.
- Boyar, S.L., Maertz, C.P., & Pearson, A. (2005). The effects of work-family conflict and family-work conflict on non-attendance behaviors. *Journal of business Research*, *58*, 919-925.
- Burke, R.J., & Greenglass, E.R. (2001). Hospital restructuring, work-family conflict and psychological burnout among nursing staff. *Psychological Health*, *16*, 583-594.
- Bruck, C., Allen, D., & Spector, P.(2002). The Relation Between Work-Family Conflict and Job Satisfaction: A Finer-Grained Analysis, *Journal of Vocational Behaviour*, 60, 336-353.
- Duxbury, L., Higgins, C., Lee, C., (1994). Work-Family Conflict : A comparison by Gender, Family Type, and Perceived Control. *Journal of Family Issues*, 15, 449-466.
- Gottlieb, B.H., Kelloway, E.K., & Matthews, M. (1996). Predictors of work-family conflict, stress, and job satisfaction among nurses. *Canadian Journal of Nursing Resources*, 28, 99-117.
- Grandey, A., Cordeiro, B. L., & Crouter, A. C. (2005). A longitudinal et multi-source test of the work-family conflict and job satisfaction relationship. *Journal of occupational and Organizational Psychology*, 78, 1-20.
- Greenhaus, J.H., & Beutell, N.J. (1985). Sources of conflict between work and family roles. Academy of management, 10, 76-89.
- Laughrea, K. (2000). Traduction de l'instrument de mesure sur le conflit travail-famille et famille-travail de Netemeyer, Boles & Mcmurrian (1996): Non-published document. Universite du Québec a Trois-Rivieres.
- Netermeyer, R. G., Boles, J. S., et Mcmurrian, R. (1996). Development and Validation of Work-Family Conflict and Family-Work Conflict and Effective Experiences, *Journal of Applied Psychology*, *81*, 400-410.
- Netermeyer, R. G., Brashear-Alejandro, T., Boles, J. (2004). A Cross-National Model of Job-Related Outcomes of Work role and Family Role Variables: A Retail Sales Context. *Journal of the Academy of Marketing Science*, 32, 49-60.
- Parshuram, C. S. (2004). Fellowship training, workload, fatigue and physical stress prospective observational study, *Canadian Medical Association Journal*, 170(6).
- Parasuraman, S., & Greenhaus, J. H. (2002). Toward reducing some critical gaps in work-family research. *Human Ressouce Management Rewiew*, 12, 299-312.

- Rice, R. W., Frone, M. R., & McFarlin, D. B. (1992). Work-nonwork conflict and the perceived quality of life. Journal of Organizational Behaviour, 13, 155-168.
- Rode, J. C., Rehg, M. T., Near, J. P., Underhill, J. R. (2007). The effect of work-family conflict on intention to quit: The mediating roles of Job and life satisfaction. *Applied Research in Quality of Life, 2 (2),* 65-82.
- Simon, M., Kummerling, A., & Hasselhorn, H.-M.(2004). Work-Home Conflict in the European Nursing Profession, International Journal of Occupational and Environmental Health, 10(3.) 384-391.
- Sokolyk, S. (2004). Dissatisfaction with Medical Practice, The New England journal of Medicine, 350(13), 157-159.
- Tattersall, A. J., Bennet, P., & Pugh, S. (1999). Occupational stress and family life: A comparison of male and female doctors. *Journal of Occupational and Organizational Psychology*, 71, 237-260.
- Yavas, O., Babakus, E, & Karatepe, O. M. (2008). Attitudinal and behavioural consequences of work-family conflict and family-work conflict. Does gender matter? *International Journal of Service Industry Management*, 19, 7-31.