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A Research Monograph of the
Printing Industry Center at RIT

No. PICRM-2009-01

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Executive Summary

The printing industry is in a human resources crisis. With the upcoming retirement wave of Baby Boomer employees, the industry has as many as 5,000 jobs to fill annually and they are having a challenge finding qualified young people to apply. The primary goal of this research study is to answer this question: what is the perception of recent college graduates about their future careers in the printing and publishing industries? This is an extremely pertinent objective as the graphic arts industry will not have any success in attracting new talent unless the young people now working in these jobs are satisfied and find the work fulfilling.

A survey was designed to assess the overall job satisfaction of graduates in graphic arts programs from the Rochester Institute of Technology (RIT). Of the 2,809 potential respondents (1,845 School of Print Media (SPM) and 964 School of Design (SD) alumni), 749 completed the survey yielding a response rate of 26.7%. Regression analyses were conducted to identify the predictors of overall job satisfaction using a number of independent variables including age, gender, and job facet perceptions. The results of the research can be summarized as follows:

- Almost all SPM respondents (90.4%) are satisfied with their job overall. However, 36.3% still plan to actively seek a new job in the next year. In a separate question regarding what the next steps in their career would be, 52.9% do plan to seek another job in the future, although not necessarily in the next year. Those who plan on making a job change are likely to stay in the same industry (28.0%), while an additional 12.9% will look in a different industry. Another 12.0% will look for a new job within the same company.
- When comparing overall job satisfaction between SD and SPM respondents, there was no statistically significant difference. There were statistically significant differences between the two groups for only two job facet satisfaction measures: the level of satisfaction with support for continuing education/ in-service programs and work environment or work culture. In both instances, SPM respondents had lower average satisfaction scores than did SD respondents.
- In terms of demographic differences within overall job satisfaction for the SPM sample, no statistically significant differences were found for age groups (generations). However, differences among age groups for four of the 23 job facet satisfaction scores were found to be statistically significant. Consistent with the stereotypes of Gen Y, the younger employees were more dissatisfied than the older groups on three of the four facets. Additionally, differences in overall job satisfaction were found for both gender and salary groups, with females being less satisfied than males and those with higher salaries being more satisfied than those with lower salaries.

- A regression analysis of the predictors of overall job satisfaction for SPM respondents revealed six pertinent correlating factors that account for 47.8% of the variation in overall job satisfaction. These six factors are shown below (in order by beta):
 - Satisfaction with personal gratification you feel from doing your job,
 - Satisfaction with the organization's goals/mission/vision,
 - Satisfaction with the opportunity to be creative,
 - Satisfaction with salary,
 - Absolute salary amount, and
 - Satisfaction with level of challenge in work.

Additional analyses revealed the career profiles of the respondents and the firms where they are employed:

- The majority of School of Print Media (SPM) respondents (87.9%) were employed, and over half of them (52.1%) worked at “traditional” graphic arts companies such as commercial printers, publishers, advertisers, and in-house marketing or printing departments. When additional “traditional” categories were added from the coded “other firm” responses (i.e., financial printer, printing equipment manufacturer, paper & printing supplies, etc.) the total was 72.3% of respondents.
- Most SPM respondents (62.2%) worked at large companies with over one hundred employees. Additionally, most of the companies where SPM respondents are employed have been in business for at least 20 years (71.9%).
- Before starting with their current employer, SPM respondents are likely to have worked for more than three other employers (57.9%). This level of experience is reflected in the fact that 73.9% of SPM respondents made \$50,000 or more per year.
- A high percentage of SPM respondents have a job that is related to their most recent degree (60.7%). More than half (59.4%) of SPM respondents believed that their experiences in school helped to prepare them for their job, and 60.7% believed that the graphic arts degree they received was important to their employer. Additionally, most SPM respondents (78.2%) believed that they have enough training and education to get ahead in their careers.

The present research supports prior research that found the following factors impacting overall job satisfaction: job level, work culture, person-culture or person-organization fit, and satisfaction with intrinsic satisfiers/motivators.

Introduction

The printing industry is in a human resources crisis. With the upcoming retirement wave of Baby Boomer employees, the industry has as many as 5,000 jobs to fill annually and they are having a challenge finding qualified young people to apply. Baccalaureate programs in printing and graphic communications are also finding it difficult to attract applicants to their programs. Even within those who express interest, a large percentage are initially interested in graphic design jobs as opposed to production, workflow or scientific jobs associated with the industry.

A number of trade organizations have either launched or discussed launching advertising campaigns to sell the industry to young people. At Graph Expo in 2007, the PGSF organized a panel discussion of ten printing professionals to address how to improve the image of graphic arts occupations in the minds of young people. But, as one of the speakers noted, not one student was included on the panel.

The primary goal of this research study is to answer this question: what is the perception of recent college graduates about their future careers in the printing and publishing industries? This is an extremely pertinent objective as the graphic arts industry will not have any success in attracting new talent unless the young people now working in these jobs are satisfied and find the work fulfilling. Nothing beats positive word-of-mouth as the most effective form of marketing.

In order to accomplish this objective, this study will draw on the extensive body of research investigating the correlates of job satisfaction. Job satisfaction is a highly studied construct within the organizational behavior and psychology fields. As shown in Figure 1, there are a number of antecedents of job satisfaction potentially indicated. Demographic differences such as age are but one of many factors that may predict whether a person will be satisfied with and stay in a job.

Introduction

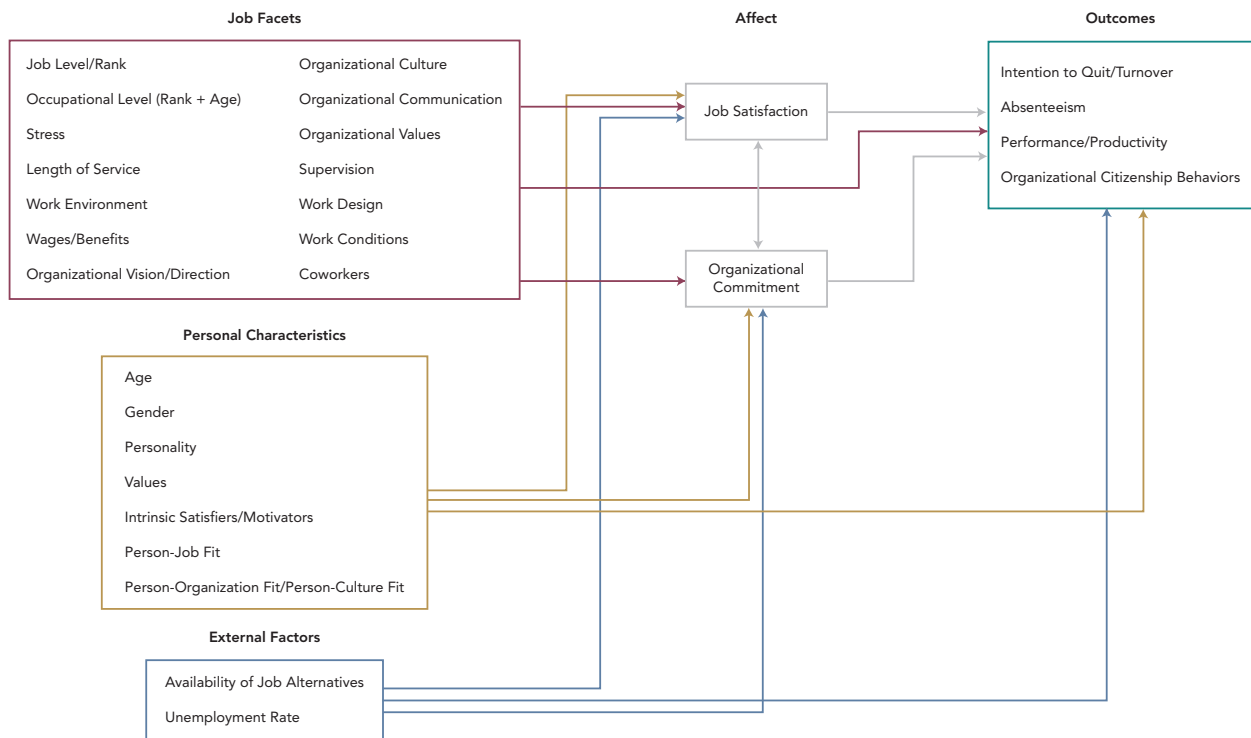


Figure 1. Researched relationships between job satisfaction and other constructs

The goal of this research is to determine which factors or constructs have the strongest correlation to overall job satisfaction among School of Print Media alumni who are currently employed in the graphic arts industry. These alumni were surveyed on the characteristics of their jobs, what they like and dislike about their jobs, and on what their employers could do to change their jobs for the better (if such changes were needed). From these data, we will determine the keys to job satisfaction within this sample. We will then make recommendations as to what managers can do to increase the satisfaction of their employees in the hopes of attracting new employees and reducing turnover of the most talented.

Literature Review

Extensive research has been conducted on job satisfaction and several other constructs or behaviors (i.e., performance/productivity, organizational commitment, absenteeism, turnover, retention) from the perspective of the organizational behavior and psychology disciplines. This literature review will investigate the various definitions of job satisfaction. It will also describe some of the contradictory findings in relation to the behavioral and attitudinal constructs studied. It will then move to a discussion of the impact of generations in the workplace.

What is Job Satisfaction?

Job satisfaction has been defined as “a pleasurable or positive emotional state, resulting from the appraisal of one’s job experiences” (Oshagbemi, 1999, p. 388, quoting Locke), as well as the “extent to which the employees expresses a positive affective orientation toward a job” (Curry, Wakefield, Price, & Mueller, 1986, pp. 847-848). It is also important to note that the ‘emotional state’ referenced above is created by “an affective reaction ... that results from the comparison of actual outcomes with those that are desired [anticipated, deserved]” (Oshagbemi, 2003, p. 1210; Oshagbemi, 1999). This affective reaction is theorized to occur soon after entry into the organization (Vandenberg & Lance, 1992). In essence, it is a worker’s attitude towards their job, whether positive (satisfied) or negative (dissatisfied).

Job satisfaction is also considered one of the two “summary markers of adult vocational adjustment,” along with success (Jepsen & Sheu, 2003, p. 162). Jepsen and Sheu (2003) go on to state that general job satisfaction is one of the five global career status outcomes (along with performance, persistence, economic stability, and identity) that employees seek through career counseling.

Job satisfaction has historically been measured either as a single-item scale (i.e., How satisfied are you with your job?), or as a multiple-item scale measuring satisfaction with different aspects of the job and/or workplace. A distinction is made between these two concepts, which are respectively referred to as overall (or general) job satisfaction and job facet satisfaction (Wanous & Lawler, 1972). The use of either measurement scale on a survey will (generally) give different results, and the conflicting results from different studies may reflect the use of different scales (Wanous & Lawler, 1972). However, as Wanous and Lawler found, there is no one best way to measure job satisfaction, and “it is possible to measure satisfaction validly with different job facets” (1972, p. 105). Oshagbemi (1999) suggests using both types of measures in studies of job satisfaction, as this will help to reveal specific areas the organization could improve (from the multiple-item scales), while at the same time allowing for cross-job comparisons (from the single-item scale).

The measurement of job satisfaction has been conducted in a myriad of studies with the hopes of discovering its relationships to other concerns of interest in the workplace.

The following sections investigate the research findings in regards to the relationships between job satisfaction and workplace factors, workplace behaviors, other constructs, and personality characteristics.

Relationships Between Job Satisfaction & Workplace Factors

Workplace factors that affect job satisfaction also affect other job aspects such as work-related stress. High levels of stress are associated with low levels of job satisfaction, and are also predictive of a greater propensity to leave the organization (Fairbrother & Warn, 2003). However, in this study of 100 naval officer trainees in the Royal Australian Navy, the researchers found that job satisfaction was influenced by factors separate from those that influence stress, although stress does affect job satisfaction (Fairbrother & Warn, 2003).

One workplace factor found to be related to both work stress and voluntary turnover is job level (Macky, Forsyth, & Boxall, 2008¹). This indicates that job level (which may or may not be related to tenure or age) plays an important part in an employee's workplace behaviors, as it affects the level of stress, which impacts job satisfaction in turn.

Occupational level (a combination of both rank and age) was also found to be one of the strongest predictors of job satisfaction (Oshagbemi, 1997). In subsequent studies, Oshagbemi (2000, 2003) also found rank on its own to be a reliable predictor of job satisfaction, as was the length of service within the current university. Other studies found work environment to be the best predictor of satisfaction, while hourly wage was the weakest (Rust, Stewart, Miller, & Pielack, 1996, p. 72).

Other workplace factors that may impact job satisfaction are internal to the organization itself: its vision, culture, and communication style. Satisfaction with the organizational vision has been shown to affect overall job satisfaction, accounting for 33% of the variance in job satisfaction (Testa, 1999²). Organizational culture may influence satisfaction through the level of person-culture fit. If the values of the individual are different than those espoused by the organization, it is very likely that the individual will feel out of place and experience lower job satisfaction as a result (O'Reilly, Chatman, & Caldwell, 1991; Judge & Bretz, 1992). Communication within the organization impacts the "climate" of the firm, which is multidimensional in nature (Muchinsky, 1977). As Muchinsky states, "the data suggest that one's affective response to organizational communication [one's satisfaction with it] is substantially related to the affective responses associated with other facets of an employee's job" (p. 602), which includes job satisfaction and organizational commitment.

1 - This study was a secondary analysis of a large national study of 1,004 New Zealand employees aged 18 and above conducted late in 2005. Participants worked in firms with 10 or more employees, and had to have worked in their jobs for more than 6 months to participate.

2 - This was a survey of 740 management personnel (with 709 usable replies) from 30 departments of a large U.S.-headquartered cruise line.

One other factor that may impact satisfaction and/or commitment is the availability of job alternatives. As found in a longitudinal study of nursing home employees, the availability of alternatives at the time of entry positively impacts organizational commitment (Bateman & Strasser, 1984). However, after an employee has joined a company, the availability of job alternatives may result in a negative impact on both job satisfaction and organizational commitment (Bateman & Strasser, 1984).

Relationships Between Job Satisfaction & Workplace Behaviors

In much of the literature, job satisfaction is the mediating factor that influences multiple workplace behaviors such as absenteeism, turnover, performance, and extra-role behaviors (Oshagbemi, 2003; Brayfield & Crockett, 1955; Rust et al., 1996; Iaffaldano & Muchinsky, 1985; Ostroff, 1992). The following section will summarize the research testing these relationships.

Performance/Productivity

In one of the early studies on this topic, Brayfield and Crockett (1955) found that productivity was unlikely to be an employee goal in and of itself; instead, it was more likely to be a means to achieve other goals held by the employee. Additionally, satisfaction with one's job or position did not imply that the individual would have a strong motivation to be productive, as it was the goals of the employee that determined the level of work. They also discovered that the work group was especially important to determining productivity, as the group standards would often determine how hard the employee worked. This was found to be especially true in cohesive groups.

Rust et al. (1996) found job satisfaction and performance to be positively correlated, while job satisfaction was also shown to positively correlate to certain facets of performance, such as organizational citizenship behaviors. Savery (1996) found that satisfaction with intrinsic satisfiers/motivators was the most important to determining both employee performance and the likelihood of leaving the organization. In a study of secondary schools, Ostroff (1992) theorized that the satisfaction-performance relationship might be stronger at the organizational level than at the individual level. She concluded that "organizations with more satisfied employees tended to be more effective than organizations with less satisfied employees. ... [And] these relationships were somewhat stronger than those typically observed at the individual level" (pp. 968-969). However, she also discussed the possibility of a reciprocal relationship in which organizations that performed better were more likely to have satisfied employees and vice versa.

Petty, McGee, and Cavender (1984) conducted a meta-analysis of JDI (Job Description Index) studies. They found that the nature of the relationship between performance and job satisfaction was unclear, but their results indicated that the "relationship between individual, overall job satisfaction and individual job performance is stronger and more consistent than that reported in previous reviews" (p. 719). Their research also indi-

cated that it was more likely for performance to be a determinant of job satisfaction (as opposed to theories indicating the opposite), that job level may moderate the relationship, and that the relationship may be circular in nature if the outcomes of performance were perceived to be inequitable.

In contrast to many of these findings (with the exception of Brayfield and Crockett's study), Iaffaldano and Muchinsky's (1985, p. 269) meta-analysis found that job satisfaction and performance are "only slightly related to each other under most employment conditions." They conclude their paper by stating that "[i]t is almost as if the satisfaction-performance relation is itself what Chapman and Chapman (1969) called an illusory correlation, a perceived relation between two variables that we logically or intuitively think should interrelate, but in fact do not" (p. 270).

Organizational Citizenship Behaviors

Organizational citizenship behaviors (OCBs, also known as extra-role behaviors) are defined as "individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and in the aggregate promotes the efficient and effective functioning of the organization" (Williams & Anderson, 1991, p. 601). Both job satisfaction and organizational commitment have theoretical and empirical support as antecedents of OCBs. However, Williams and Anderson (1991) found that the performance of OCBs was more a function of equitable treatment by the organization and the equity of its policies and procedures than of any attitudinal constructs (p. 615).

Turnover & Absenteeism

Turnover is expensive. Quitters generally cost the organization one and a half to two and a half times their annual salary in separation, replacement, and training costs (Rust, et al., 1996). The United States currently has the world's highest median voluntary turnover rate at 11% (Watson Wyatt Worldwide, 2007). However, the turnover rate for critical skill or top performing employees was only 5% (Watson Wyatt Worldwide & WorldatWork, 2007).

Turnover and absenteeism are often talked about in relation to each other: employees who are absent from the job most often are more likely to dislike their jobs and more likely to leave the company (Büssing, Bissels, Fuchs, & Perrar, 1999; Agho, Price, & Mueller, 1992). However, the intention to quit was not significantly related to either voluntary or involuntary absenteeism in a 1994 survey of 199 United Kingdom university teachers with one to ten years of service (Oshagbemi, 2000). This indicates that absenteeism is not always an antecedent to the intention to leave the company, regardless of tenure.

The four main managerial processes that have been linked to both employee satisfaction and retention are supervision, benefits, work design, and work conditions, respectively (Rust et al., 1996, p. 67). Another factor in employees leaving can be an incompatibility with the corporate culture which results in employees feeling as though they don't

“fit in” (Wallach, 1983). Person-job fit and person-organization fit can also be predictive of turnover (O’Reilly et al., 1991). However, many retention problems are caused by an imperfect comprehension of employee priorities (Watson Wyatt Worldwide, 2007). As shown below in Figures 2 and 3, there is a disconnect between employers and employees in regards to what attracts employees to the company and to what causes them to leave.

Rank	Reasons to Join		Reasons to Leave	
	Employees	Employers*	Employees	Employers*
1	Nature of work (44%)	Career development opportunities (47%)	Stress levels (37%)	Base pay (52%)
2	Base pay (31%)	Base pay (46%)	Base pay (33%)	Career development opportunities (47%)
3	Job security (30%)	Employer reputation (44%)	Promotion opportunity (26%)	Promotion opportunity (45%)
4	Employer reputation (23%)	Company culture (34%)	Career development opportunities (23%)	Relationship with supervisor/manager (35%)
5	Length of commute (23%)	Nature of work (26%)	Work/life balance (22%)	Work/life balance (24%)

*Percentage reporting element as one of the top three reasons employees consider joining or leaving an organization

Figure 2. Reasons to join or leave a company globally (Adapted from Watson Wyatt Worldwide & WorldatWork, 2007, p. 7)³

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Rank	Reasons to Join			Reasons to Leave		
	Top-Performing Employees	Employees	Employers*	Top-Performing Employees	Employees	Employers*
1	Nature of work (46%)	Nature of work (41%)	Employer reputation (37%)	Stress levels (42%)	Stress levels (40%)	Base pay (53%)
2	Base pay (28%)	Base pay (33%)	Company culture (35%)	Work/life balance (32%)	Base pay (28%)	Career development opportunities (49%)
3	Health care benefits (22%)	Employer reputation (29%)	Base pay (34%)	Promotion opportunities (29%)	Promotion opportunities (26%)	Promotion opportunities (43%)
4	Job security (20%)	Health care benefits (26%)	Career development opportunities (32%)	Career development opportunities (25%)	Work/life balance (25%)	Relationship with supervisor/manager (41%)
5	Employer reputation (19%) Retirement benefits (19%)	Job security (23%)	Nature of work (29%)	Incentive pay opportunity (20%)	Trust/confidence in senior management (23%)	Work/life balance (23%)

*Percentage reporting element as one of the top three reasons employees consider joining or leaving an organization

Figure 3. Reasons to join or leave a company in the U.S. (Adapted from Watson Wyatt Worldwide & WorldatWork, 2007, p. 18)⁴

However, Carsten and Spector (1987) conducted a meta-analysis of turnover studies and determined that the economic opportunity factors (i.e., unemployment) had the strongest impact on turnover out of any other possible factors (including job satisfaction and behavioral intentions). They found that the relationship between job satisfaction and turnover was moderated by unemployment even after adjusting for the quit rate (p. 378). Overall, they concluded that a person would rather stay at a job they disliked than face unemployment, and that these economic factors (at both the local and national level) were more important in determining turnover than any other attitudinal factor.

Relationships Between Job Satisfaction & Other Constructs

One of the most researched (and most disputed) relationships is between job satisfaction and organizational commitment. Organizational commitment is “the extent to which an employee identifies with and is involved in the organization” (Curry et al., 1986, p. 847).

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Organizational commitment has historically been viewed as a more stable construct than job satisfaction (Curry et al., 1986; Bateman & Strasser, 1984). It is viewed as beginning to emerge as a “function of pre-entry experiences” (Bateman & Strasser, 1984, p. 107) which is then solidified upon organizational entry as a result of the level of cognitive dissonance experienced (Vandenberg & Lance, 1992). It may further develop as the employee develops “investments that bind [him or her] to [the] organization” (Meyer et al., 1990, p. 719). However, some studies have shown that job satisfaction was just as stable as organizational commitment when measured over time (Curry et al., 1986).

Historically, job satisfaction has been theorized as antecedent to organizational commitment (Vandenberg & Lance, 1992; Curry et al., 1986). Although this relationship has been popularized, organizational commitment has been found to be antecedent to job satisfaction in several studies (Bateman & Strasser, 1984; Vandenberg & Lance, 1992). Additionally, “no causal effects [have been found] in either direction ... over time” (Curry et al., 1986, p. 851-852), although this theory was not supported by the research of Vandenberg and Lance (1992). It is also possible that the two constructs have a cyclical relationship, although this was not tested in the studies surveyed.

Other constructs studied in relation to job satisfaction are engagement and person-organization fit. Engagement has been defined as “creating conditions for meaningful employee expression in work roles” (Avery, McKay, & Wilson, 2007, p. 1542), and as commitment, which is “motivation on the part of employees to help the organization succeed”, in conjunction with line of sight, which is the “focus and direction that enables employees to understand what to do to make their organizations successful” (Watson Wyatt Worldwide, 2007, p. 3). Engagement has been demonstrated to be a predictor of turnover, customer satisfaction and loyalty, safety in the workplace, and, to some extent, productivity and profitability as well (Avery et al., 2007). It also has been shown to directly affect employee performance (Avery et al., 2007; Watson Wyatt Worldwide, 2007).

One aspect of job satisfaction that has been shown to be significantly related to engagement is satisfaction with one’s coworkers (Avery et al., 2007). This is important in regards to retention, as employees who are engaged are less likely to leave (Avery et al., 2007, Watson Wyatt Worldwide, 2007).

Person-organization fit is defined as “the degree to which individuals are suited to a job”, and “depends on their motives and need and the job’s requirements” (O’Reilly et al., 1991, p. 489). Values are also “an important determinant of person-organization fit” (Judge & Bretz, 1992, p. 269), as the congruency of the values of the individual to the work values within the organization is an essential component of what determines person-organization fit (Judge & Bretz, 1992). Organizational work values were shown to significantly impact job choice when information about them was known in a study of 67 professional and graduate students. This indicates that a person will be more likely to choose a job where he or she believes their values will fit well with the organization

(Judge & Bretz, 1992). When the individual is considering entering the organization, they consider the salary, the opportunity for promotion, and the organizational value factors, but the effects of the organizational value factors on job choice were stronger than the effects of the other two factors (Judge & Bretz, 1992).

Once the individual has entered the firm, person-organization fit continues to be an important determinant of on-the-job attitudes and behaviors. Job satisfaction can be predicted by person-organization fit, as can organizational commitment, performance, and turnover. The effects of person-organization fit on these constructs were found to occur independently of age, gender, or tenure (O'Reilly et al., 1991). Additionally, job satisfaction and organizational commitment were predicted a year after the initial measurement of fit, and actual turnover was predicted after two years (O'Reilly et al., 1991). This indicates that person-organization fit continues to impact the employee long after the initial 'settling-in' period is over. If the employee does not feel that they fit in, they tend to leave (O'Reilly et al., 1991; Wallach, 1983).

Relationships Between Job Satisfaction & Personal Characteristics

Several personal characteristics, such as age, gender, and personality, have been reported to affect job satisfaction. They may affect it directly, as in the case of age (Oshagbemi, 2003), or they may affect it indirectly by affecting other factors that impact job satisfaction, such as stress (Fairbrother & Warn, 2003). Personality may also influence the initial job choice itself (Judge & Bretz, 1992).

As people progress through the career life stages, their job satisfaction is expected to increase (Westerman & Yamamura, 2007; Jepsen & Sheu, 2003). As the individual gains more work experience, they will be able to move closer to their ideal work situation and they will therefore attain more job satisfaction. However, survey data does not always provide support for this progression. In a 25-year study of 169 high-school graduates, it was found that the average job satisfaction scores remained the same during the adult years, whereas the average job congruence (measured by the similarity between the individual's major in college and the position held at the time of the survey) increased significantly (Jepsen & Sheu, 2003). Davis (2004) also found no evidence to support the hypothesis that older people tend to be more satisfied with their jobs than younger people, and no statistically significant generational differences have been found for job satisfaction in recent research (Macky, 2008).

As discussed by Oshagbemi (2003), the relationship between age and job satisfaction is uncertain. Two different explanations exist: linear and curvilinear. The linear relationship is explained by the ideas of accommodation (adjusting to the workplace) and an increased ability to obtain more rewarding jobs due to seniority and experience. The curvilinear relationship is explained by the idea that stress on the job increases over time as changes in the environment, increased pressure to perform at higher levels, and a desire to retire earlier, all collide.

Although gender has been reported to affect job satisfaction from time to time, overall there is very little evidence to support the idea that gender directly influences job satisfaction (Oshagbemi, 2003). Contradicting survey results on this matter further confuse the theory, although it has been determined that men and women have differences in what needs are satisfied by a job, which may impact how they respond to satisfaction questions (Oshagbemi, 2003).

Personality characteristics can affect the level of job satisfaction an individual is able to experience at work. As stated by Jepsen & Sheu (2003), "... some personalities are more likely to be satisfied regardless of their fit with their work" while "... some kinds of work produce job satisfaction irrespective of the extent of matching with personal characteristics" (p. 165). Research by Agho et al. (1992) identified two distinct personality variables—positive affectivity and negative affectivity⁵—that were shown to directly influence job satisfaction. Through their impact on satisfaction, these variables also indirectly influence organizational commitment.

Conclusion

In sum, much of the research conducted to investigate potential linkages between job satisfaction and other constructs has been contradictory to other studies conducted on the same subject. It appears that cross-sectional research will result in different findings depending on what industry or sector is studied. This does not necessarily indicate that the relationship of job satisfaction to other attitudinal constructs is dependent on the industry or job being studied. However, some findings do indicate that such relationships are more heavily influenced by job-specific and individual personality or attitudinal factors than had been previously thought. Indeed, it is possible that job satisfaction, performance, and organizational commitment are entirely unrelated concepts within the mind of the employee, although specific factors of the job or the individual may impact all three simultaneously in varying ways.

Generations at Work: Is there a Cohort Effect?

As the Baby Boomer workforce continues to move towards retirement, the next great change for American businesses will be the continued rise of Generation X (born between 1965 and 1985) and the introduction of Generation Y (born between 1986 and 2002) workers into the workplace. Currently, Generations X and Y together make up 45% of the workforce (Westerman & Yamamura, 2007). Workers under 34 years of age are projected to compose approximately 60% of the full-time workforce in the United States by 2010 (Westerman & Yamamura, 2007). Executives and mid-level managers alike wonder how this will affect their companies, and whether or not they will be able to attract these younger workers into their company and convince them to stay. A large concern is friction among age groups. Are generations so different in terms of values and work styles that they will not be able to work together successfully?

⁵ - Affectivity is defined as the disposition to be happy (positive) or to experience discomfort (negative) across time and situations (Agho et al., 1992, p. 186).

Hypotheses about differences between generations are based on cohort theory. Cohorts are defined as a given group of members who were “born in a limited span of consecutive years [ergo, a generation] and whose boundaries are fixed by peer personality” (Glass, 2007, pp. 98-99). Peer personality is “a generational persona recognized and determined by common age, location, shared beliefs, behavior, and perceived membership in a common generation,” and it is developed because of the “defining events” experienced between ages 5 and 18, the prime developmental years that affect the group’s outlook on work and life (Glass, 2007, p. 99).

Smola and Sutton used this theory as the basis of their 2002 study “Generational differences: revisiting generational work values for the new millennium.” The study aimed to compare work values among cohorts from a 1974 study with cohorts from a 1999 study. However, the study was unable to compare values for all defined generational cohorts, as not enough data existed to compare any cohorts except Baby Boomers and Generation X. WW II-ers, Swingers, and Millennials/Gen Y were all excluded. Although this study is quoted as illustrating “[t]he existence of generational differences” through its conclusion that “work values are more influenced by generational experiences than by age and maturation” (Westerman & Yamamura, 2007, p. 151), the authors contend that the study only illustrates the fact that generational experiences may impact work values more strongly than do age or maturation alone. However, this study contained no evaluation of actions or behaviors based on the work values espoused. It is not possible to determine whether or not generations will act differently at work based on their answers to a survey.

One of the most ‘concerning’ generations today is Generation Y, also known as the Millennials or the Echo Boomers. An analysis of the popular media reveals that there are thirteen specific areas of differences reported about Generation Y, all of which deal with their expectations regarding aspects of work. These include: work/life balance, personal growth, employer policies and structure, management styles, salary/benefits, meaningful work, working in teams, parental involvement, entrepreneurship, changing jobs, importance of friendships, technology, and self-worth. These are each discussed in more detail below.

Work/Life Balance

According to most articles, Generation Y is not interested in making work their life. Instead, they want to make their jobs accommodate their family and personal lives (Armour, 2005; Spiro, 2006). However, they are willing to accept working on the weekends in exchange for increased flexibility and balance in their day-to-day life during the week (Trunk, 2007; Rowh, 2007; Spiro, 2006). Many also do not accept the tradition of working unpaid overtime – they use technology to increase their efficiency, and don’t value “punching the clock” as a method of tracking work effectiveness (Hira, 2007). Their personal commitments take priority over work schedules (Safer, 2007), and, since many Gen Yers are still in school, they are more likely to need schedule flexibility (Martin, 2005).

Personal Growth – High Maintenance, High Expectations

Generation Y is characterized as being high-maintenance, but also as high-performance (Armour, 2005; Martin, 2005). They have high expectations for themselves, their employers, and also for personal growth, even in entry-level jobs (Armour, 2005; Spiro, 2006; Trunk, 2007). They want to see a return on their investment into their education and their job (Balderrama, 2007), and are willing to work faster and better than other workers (Armour, 2005; Spiro, 2006). In return, they expect their managers to be highly involved in their personal development (Armour, 2005; Spiro, 2006), and they seek out new creative challenges (Martin, 2005; Armour, 2005; Spiro, 2006). However, they are also known for challenging authority. They have a ‘speak your mind philosophy’, and they don’t take orders without questioning everything (Armour, 2005; Hira, 2007; Martin, 2005). This is reflected in the statistic that 55% of employers over the age of 35 feel that Gen Y workers have a more difficult time taking direction or responding to authority than other generations of workers (CareerBuilder.com, 2007).

Employer Policies and Structure

Employers are trying to figure out how to recruit and retain younger workers (Armour, 2005; Spiro, 2006). The purported key to keeping Generation Y workers is changing policies and company structure in order to keep them happy at work. An example of this is online shoe retailer Zappos, where “[a]ctual work actually happens, despite goofy parades, snoozing in the nap room, and plenty of happy hours” (Safer, 2007). Of the 15% of employers who have changed or implemented new policies/programs to accommodate Gen Y workers, 57% have changed work schedules, 33% have increased their recognition programs, 26% have increased access to technology, 26% have increased salaries and bonuses, 24% have added more ongoing education programs, 20% have started paying for cell phones, Blackberrys, and other communication devices, 18% have added more telecommuting options, and 11% have added more vacation time (CareerBuilder.com, 2007).

Management Styles

Gen Yers are purported to need more feedback than other generations (Armour, 2005). Praise is especially important for them (Safer, 2007; Spiro, 2006). They also have had plenty of experience with different kinds of managers before entering the workforce full-time, as most will have had three to four part-time jobs previously (Martin, 2005). However, they hate micromanagement, but at the same time need help developing time management skills (Martin, 2005). With this desire for a balance between supportive and watchful management (Rowh, 2007) is the desire to have the freedom and flexibility to get the task done in their own way, at their own speed (Martin, 2005). In fact, “Yers love to be given the results you want and the freedom to figure out the process to achieve them” (Martin, 2005, p. 40).

Salary/Benefits

Generation Y has seen the changes in the stock market over time, and is less likely to care about stock options as a result (Rowh, 2007). They are financially savvy, and care about benefits like retirement plans (Armour, 2005). Although many believe that “[m]oney creates the freedom to live the life [they] want,” inflation has eaten away at what that money will buy, which may make them feel less secure (Jayson, 2007). As a result, they expect to be paid more and get farther faster in return (CareerBuilder.com, 2007). Many Generation Yers pursue graduate degrees because they have a high regard for education (Spiro, 2006), and they ask for more in return for their investment.

Meaningful Work

Many Generation Yers are reported to highly value self-fulfillment (Armour, 2005). They have been raised with the idea that they can do something important in life, and they therefore want to spend their time in meaningful and useful ways (Trunk, 2007; Gogoi, 2005). They want to make an important impact at their job right away, and they are reluctant to perform tasks that lack depth due to their greater need to feel valued (Armour, 2005; Spiro, 2006; Rowh, 2007). Employers who support volunteering are likely to be more attractive to Gen Y workers, and they also like to take time off to travel and pursue alternative activities in their search for meaning in their work (Trunk, 2007; Gogoi, 2005). Sheena Lindahl, a 24-year old entrepreneur who now helps others to pursue their dream careers, perhaps puts it best: “... It’s hard for people in our generation to just do work” (Jayson, 2006).

Working in Teams

Generation Y is reported to ‘love’ working in teams, especially ones that are fluid and can adapt to the needs of the problem to be solved (Rowh, 2007). Teams of peers are reported to be more comfortable for Gen Yers to work on, as they are used to communicating with people their own age (Jayson, 2006). Overall, “[t]hey work well alone, but they work better together” (Martin, 2005, p. 40).

Parental Involvement

Since more than half of new graduates move back in with their parents, it is very easy for parents to remain highly involved in their Gen Yer’s life (Trunk, 2007; Safer, 2007). Often, the parental involvement has not been abated throughout the college experience. This involvement has been termed the “coddling virus,” where parents stay involved at the college level, and some even phone their child’s first employers (Safer, 2007). This has resulted in a delayed adolescence, and adulthood is now perceived by most to begin at 26 or older (Safer, 2007).

Entrepreneurship

Generation Yers are the children of Baby Boomers. They have seen their parents and other adults deal with changes in corporate America that often resulted in the loss of jobs. This has led to the idea of being ‘free agents’, where entrepreneurship is a safety

net (Trunk, 2007). People can create a job for themselves when they can't find one they like, since the self-employed tend to be more satisfied with their jobs than other workers (Jayson, 2006). The Internet has also enabled this shift, since it is now possible to have professional home-based businesses (Jayson, 2006).

Changing Jobs

In addition to the option of entrepreneurship, Gen Yers also view 'job hopping' as an alternative to staying in a job they dislike. They have seen corporations act disloyally to their parents, so they have no qualms about changing jobs rapidly. In fact, many do not expect to stay in a job or even career for too long (Armour, 2005). Many also think that they can 'get more' by trying new companies and careers (Safer, 2007), and it is also a way out of companies when no career development opportunities are presented (Trunk, 2007). Gen Yers also are unwilling to compromise, and rarely settle for a job when they think they can do better elsewhere (Gerdes, 2007; Rowh, 2007).

Importance of Friendships

As detailed in one anecdote, Gen Yers are reported to choose jobs merely to be with their friends because of the level of importance those relationships carry in their life (Trunk, 2007). Some even start business with friends (Jayson, 2006). As Safer (2007) writes, "[f]amily and friends are their new priorities, while blind careerism is beginning to fade."

Technology

Generation Y grew up during the technological revolution, and were participants in it (Balderrama, 2007). They are the first generation of "unconscious" technology users to enter the workplace, which affects how they do things (Erickson, 2007). This has also affected their level of patience with technology and the time they want to invest in learning how to do things, making it much shorter than those unused to technology (Martin, 2005; Rowh, 2007). They are tech savvy, and their technological 'gadgets' are an extension of their bodies (Safer, 2007; Hira, 2007). Their familiarity with technology has led to a preference for using it to communicate, to solve problems virtually, and to create (Rowh, 2007; Armour, 2005; Martin, 2005). In order to better control the use of technology in the workplace (and curb the distractions it can bring), some companies have put media policies in place to guide the use of technology (Rowh, 2007).

Self-Worth

Generation Yers are reported to have been the center of attention and to have obtained many awards and accolades as they've grown up (Jayson, 2007; Safer, 2007). This has led to an optimistic view of themselves and the possibilities open to them. Since they have been told that they can be anything they imagine since birth, they believe this, and are "determined to live their best lives now" (Hira, 2007). They also have been trained to put themselves first (Safer, 2007; Hira, 2007), and they think that fame and fortune can happen to anyone (Jayson, 2007).

Conclusion

Much of the popular media on this topic contains anecdotes indicating the vast differences that Generation Y is bringing to the workplace. These range from evidence on generational gaps in communication styles and job expectations⁶ (CareerBuilder.com, 2007) to statements that “[t]he workplace has become a psychological battlefield, and the millennials [Generation Y] have the upper hand” (Safer, 2007). Anecdotes from Generation Yers themselves are extremely popular as well, and are used as “evidence” of the extreme differences that exist. Some examples of this are:

- One Gen Yer and her seven friends, all of whom haven’t remained in one job or city since they graduated just four years ago (Gerdes, 2007).
- A moving company who hired “an entire athletic team” in order to motivate the workers to stay in their positions (Trunk, 2007).
- A young entrepreneur who started a dozen businesses before turning 21 (Jayson, 2007).
- A student who deferred a job at a prime management consulting firm to accept a Fulbright scholarship – and then quit the job once she started it after just three months to go back to graduate school full-time and study something she was passionate about (Gogoi, 2005).

Although these anecdotes may be true, recently conducted research sheds light on the fact that there is “limited empirical evidence” of generational differences from a human resources management perspective (Macky, Forsyth, & Boxall, 2008, p. 1). This study (which will be published in an upcoming edition of the *Journal of Managerial Psychology* with several other empirical studies on generational differences) also states that the prevalent stereotypes of today are not reflected in the empirical research on this topic (p. 3). Westerman and Yamamura (2007, p. 152) agree, stating, “... the influence of work environment preference differences between the groups [Baby Boomers as compared to Generations X and Y] remains empirically unverified and untested.” Additionally, the most vocal proponents of generational differences tend to be those with something to sell, be it consulting services or studies on Gen Y (Read, 2007).

Other articles have pointed out the lack of evidence (with the exception of anecdotes) regarding Generation Y’s habits and behaviors (Jayson, 2006; Read, 2007). Some articles have also asserted that individual differences do exist within generational ‘cohorts’

6 - These findings are from a 2007 survey of 2,546 hiring managers and human resources professionals across all industries by CareerBuilder.com. Of those surveyed, 49% felt that Generation Y communicates more through technology than in person, 25% felt that they have a different frame of reference (especially in regards to pop culture), 87% felt that some or most of them feel more entitled to compensation, benefits, and career advancement than older generations, 74% felt that they expect to be paid more, 61% felt that they expect to have flexible work schedules, 56% felt that they expected to be promoted within a year, 50% felt that they expect to have more vacation or personal time, and 37% felt that they expect to have access to state-of-the-art technology.

(Martin, 2005; Kupperschmidt, 2000), and that these differences are more important for management to consider than are the supposed generational similarities (Rowh, 2007; Ryan, 2007). It has also been noted that similar fears were aired against Generation X when they first entered the workforce, but that they have since learned how to deal with work, as will Generation Y (Ryan, 2007).

Jack and Suzy Welch (2007) also agree that “[w]hat we’ve seen [in Gen Y workers] is different [than the stories out there],” and they have also “...found Gen Yers to be hard-working, entrepreneurial, startlingly authentic, refreshingly candid, and wonderfully upbeat.” They conclude that there is no real proof of generational differences, and that all Generation Y needs is a chance to grow up. This is echoed by Macky, Forsyth, and Boxall⁷ (2008, p. 2), who state that any perceived generational differences could be due to “simple differences in maturity and/or concurrent life and work experiences,” since Generation Y is younger, has less work experience, and is more likely to experience higher stress and fatigue levels as they adjust to working full-time.

For the purpose of our study, it is important to determine if there are generational differences in attitudes towards work. If these differences exist, they will impact the hiring of and retaining of employees. To address this issue, our research will explore the following questions:

- What is the level of satisfaction of each age group? Does satisfaction vary by age (that is, are there generational differences)?
- What factors predict the intentions of younger generations to stay in their current job, company, and/or industry?

To test whether attitudes towards work are unique to graphic communications, printing, and publishing professionals, we included a control group of RIT School of Design alumni in our survey. This is discussed in more detail in the following section.

7 - This study was a secondary analysis of a large national study of 1,004 New Zealand employees aged 18 and above conducted late in 2005. Participants worked in firms with 10 or more employees, and had to have worked in their jobs for more than 6 months to participate. Very few practical differences were found between any of the three generations studied (Y, X, and Boomer), and the study’s main conclusion is that Generation X may, in fact, be the most different from the other two.

Methodology

Survey Design

The initial survey was created for School of Print Media alumni. Question logic was used to allow respondents to be classified into one of two segments: employed or retired/unemployed. Survey questions were duplicated for each segment, with changes to the wording to reflect the status of the respondent. The survey was designed to collect the following kinds of information: demographic information, information on the job and company where the respondent is/was employed, and satisfaction (both overall and with a range of job facets). The survey was then edited to meet the specifications of the RIT Human Subjects Research Office (HSRO), and was reviewed and approved by the HSRO. The initial survey was then duplicated and customized for use in surveying the School of Design alumni. The precise wording of the questions and the frequency of responses are presented in Appendix A.

Procedure

The survey was administered using an online survey service. In April of 2008, an e-mail was sent to the alumni of both the School of Print Media and the School of Design inviting them to complete the survey. The alumni sampled are only those who had provided their e-mail addresses to the RIT Alumni Office and are a subset of all graduates. The sampling frame was $n=1,845$ for the School of Print Media and $n=964$ for the School of Design. Respondents were eligible to be entered into a drawing to win one of four iPod Nanos (two Nanos were given away to each pool of respondents). Reminder e-mails were sent one week after the initial e-mail was distributed. After three weeks, the surveys were closed.

Data Analysis

The total number of respondents was 749, with 307 School of Design (response rate of 31.8%) and 442 School of Print Media respondents (response rate of 24.0%). Not all respondents answered all questions, since the survey did not require all questions to be answered. Analysis of the gathered data was conducted using SPSS software (version 16.0). Open-ended responses deemed necessary for further research were coded appropriately. Frequencies of all question responses are given in Appendix A.

Demographic Profiles

School of Print Media (SPM) respondents were mostly male (70.4% male, 29.6% female). The age distribution revealed 27.8% between the ages of 20 and 29, 31.3% between the ages of 30 and 44, and 40.9% age 45 and older. Almost all (90.8%) were from the United States, with 3.1% from North and Latin America (outside of the U.S.), 3.1% from Asia, and 1.9% from Europe. Almost half (49.8%) had graduated within the last fourteen years, with 28.9% graduating 15-25 years ago, and the remainder (21.3%) graduating more than 25 years ago. (This was the year of most recent graduation from

a college or university, and may reflect a return to school to pursue a more advanced degree.) At the point of this most recent graduation, 68.2% held bachelor's degrees, 28.5% held master's degrees, 0.5% held a doctorate, and 2.9% received another type of degree or certificate.

School of Design (SD) respondents were mostly female (64.1% female, 35.9% male). They were also somewhat younger than the SPM sample, with 35.6% between the ages of 20 and 29, 52.1% between the ages of 30 and 44, and 12.2% age 45 and older. Almost all (92.1%) were from the United States, with 3.9% from Asia, 2.3% from North and Latin America (outside of the U.S.), and 1.0% from Europe. Almost two-thirds (65.9%) had graduated within the last fourteen years, with 33.8% graduating 15-25 years ago, and only 0.3% graduating more than 25 years ago. (This was the year of most recent graduation from a college or university, and may reflect a return to school to pursue a more advanced degree.) At the point of this most recent graduation, 79.9% held bachelor's degrees, 17.1% held master's degrees, 0.3% held a doctorate, and 2.6% received another type of degree or certificate.

Research Findings

The results of the survey will be presented in the following order:

- Is there a difference in satisfaction between School of Print Media (SPM) and School of Design (SD) alumni?
- Within the SPM alumni population, are there differences in overall satisfaction by demographic groups as defined by generation, gender, and salary level?
- What are the major predictors of overall job satisfaction?
- What predicts the intention to change industries?

Each question is shown below with the corresponding data analysis and discussion following. Before we discuss the hypothesis tests, we will provide a description of the overall frequency analysis on each question.

SPM Frequency Analysis

The majority of the respondents (87.9% of 428 respondents) indicated they were employed. This included the following categories: employed full-time (76.4%), employed part-time (0.7%), self-employed/entrepreneur (6.5%), contract/freelance work – full-time (1.2%), contract/freelance work – part-time (1.4%), continuing education part-time while employed (0.7%), and continuing education full-time while employed (0.9%). The remainder (12.1%) were either retired, employed in alternative types of work, or unemployed. This included the following categories: caring for my family/home full-time (0.5%), serving in the military (0.2%), continuing education full-time

(0.9%), unemployed – seeking employment (2.8%), unemployed – not seeking employment (0.5%), and retired (7.2%). No respondents were continuing their education part-time while unemployed.

From this point forward in the analysis, the data provided is specific to those SPM respondents who were classified as employed.

Firm Characteristics

Of the 361 respondents who responded to the question regarding the type of firm where they work, 29.6% worked at commercial printing firms, 8.3% worked at publishing firms, 3.9% worked at advertising firms, 3.9% worked at in-house corporate communications/marketing departments, 3.3% worked at in-house educational/non-profit print shops, 1.4% worked at design firms, 1.1% worked at in-house corporate print shops, and 0.6% worked at in-house educational/non-profit communications/marketing departments. Almost half of the respondents (47.6%) indicated “other” types of firms. These responses have been coded and are presented in Table 1.

Table 1. Coded “other” firm responses

Other Firm Codes	Percent of Respondents (n=361)
Education	6.93%
Miscellaneous/Non-printing	5.82%
Consulting & Recruiting	4.16%
Software & IT	3.88%
Printing Equipment Manufacturer	3.60%
Package & Label Printing	3.32%
Government & Government Agencies	2.49%
Consumer Products	2.22%
Paper & Printing Supplies	2.22%
Printing Product Manufacturer	1.66%
Financial Printing	1.66%
Digital Printing	1.66%
Document Services	1.39%
Marketing (Unspecified)	1.11%
Prepress	1.11%
Manufacturing (General, Non-printing)	1.11%
Retail	1.11%
Direct Marketing/Mail	0.55%
Self-employed	0.55%
Book Manufacturing	0.55%
Health Care & Hospitals	0.28%
Architecture	0.28%

The majority of respondents (62.2%) worked at companies with more than 100 employees (24.6% 100-499 employees, 37.6% 500+ employees). The remainder (37.9%) worked at companies with less than 99 employees as follows: 1-5 employees – 8.7%, 6-10 employees – 3.8%, 11-19 employees – 4.3%, 20-49 employees – 8.4%, 50-99 employees – 12.7%.

In addition to working at larger firms, respondents also tended to work at firms that had been in business for more than 20 years (71.9%). Of these, 27.2% had been in business for 20-49 years, 21.8% for 50-99 years, 14.9% for 100-149 years, and 8.0% for more than 150 years. The remaining respondents (28.1%) worked for firms that had been in business for less than 20 years as follows: 1-5 years – 9.2%, 6-10 years – 8.0%, 11-19 years – 10.9%.

Employee and Job Characteristics

A large majority (83.2%, n=358) of respondents started working for their current employer since 1995 (1995-1999 - 11.2%, 2000-2004 – 24.0%, 2005-2008 – 48.0%). Respondents were likely to have worked for more than three other employers before starting their current job (57.9% had worked for three or more employers). Additionally, 66.6% of respondents have been at the same position since starting with their current employer, while the remaining 33.4% have changed jobs since starting with their current employer. (Job titles were reported as open-ended responses. These are shown arranged by company type in Appendix C.)

Respondents also tended to have this job as their only job, with only 12.2% who indicated that they held another job outside of their primary job. Of those with other jobs, the majority (84.4%, n=45) had one other part-time job, with 6.7% who held one other full-time job and 8.9% indicating that they held two or more other part-time jobs. In terms of annual income, the median salary level was between \$60,000 and \$69,999 a year (11.5% of respondents). However, the distribution was skewed, with 21.3% of respondents indicating they earned more than \$100,000 a year.

The current job held was also likely to be highly related to the most recent degree attained (60.7%). Respondents also tended to feel that they had been “more than adequately” (36.7%) or “exceptionally well” (22.7%) prepared for their current job by their experiences at school. In turn, they also tended to feel that their graphic communications degree was “important” (29.6%) or “very important” (31.1%) to their employers. Their most recent experience in school was also felt to have helped them prepare for their future careers, as 51.0% felt that they had the education and training necessary to get ahead in their career, while 27.2% felt that they had more than enough education and training necessary to get ahead in their careers.

Overall Satisfaction and Job Facet Satisfaction

Almost all (90.4%) of SPM respondents were satisfied with their jobs. The majority of the satisfied respondents were “mostly satisfied” (51.5%), while 21.0% were “some-

what satisfied” and 17.9% were “completely satisfied”. Only 7.4% were dissatisfied with their current jobs (including the categories of “somewhat dissatisfied” at 4.3%, “mostly dissatisfied” at 2.8%, and “completely dissatisfied” at 0.3%), while 2.2% were unsure of their satisfaction level. In addition, 23 job facets were queried on a 5-point satisfaction scale. The sum of the satisfied (includes “very satisfied” and “satisfied”) and dissatisfied (includes “dissatisfied and “very dissatisfied”) for each facet is shown below in Table 2 (facets are shown ordered from highest to lowest percent satisfied). Neutral responses are not provided in this table, but can be seen (along with full response frequencies for all questions) in Appendix A.

Table 2. Job facet satisfaction levels of SPM respondents

Facet	Satisfied (%)	Dissatisfied (%)
Quality of service/product provided/produced	84.20%	2.80%
Relationships with coworkers	83.00%	2.50%
Flexibility to do your work when and how you like	79.10%	8.10%
Organization’s goal/mission/vision	75.90%	7.10%
Level of technology employed at the company	75.20%	8.10%
Organization’s ethical standards	74.60%	8.00%
Personal gratification you feel from doing your job	73.70%	7.70%
Relationship with immediate supervisor/boss	72.30%	10.30%
Level of challenge in work	71.60%	8.60%
Opportunity to be creative	71.20%	8.60%
Human diversity (gender, ethnicity)	70.00%	5.90%
Job security	65.50%	9.00%
Respect by upper management	64.90%	14.60%
Work environment or work culture	64.90%	12.40%
Ability to balance work and the rest of your life	64.50%	13.10%
Proximity of work to your home	60.80%	16.60%
Fringe benefits	54.30%	17.70%
Effectiveness of organizational leadership	51.60%	21.10%
Amount of on-the-job stress	49.20%	24.10%
Salary	48.90%	23.10%
Potential for career/professional advancement	44.80%	24.30%
Support for continuing education/in-service programs	39.60%	30.40%
Accessibility/proximity of childcare services	16.80%	14.90%

Employer Promises and Career Plans

Almost one-quarter of respondents felt that their employers had broken promises made during recruitment, with 16.4% of respondents “agreeing” and 6.3% “strongly agreeing” that their employer had not kept all of the promises made during recruitment. The remainder of the respondents were either neutral (31.5%) or felt that their employer had not broken any promises made during recruitment (45.7%).

Over one-third (36.3%) of SPM respondents planned to actively seek a new job in the next year (combining categories of “highly likely” at 19.1% and “likely” at 17.2%). An additional 20.6% were unsure as to whether or not they would seek a new job within the next year, while 43.1% did not plan to seek a new job within the next year (combining categories of “unlikely” at 17.8% and “highly unlikely” at 25.3%).

When asked what the next steps in their career would be, 52.9% planned to seek another job in the future. Those who planned on making a job change were likely to stay in the same industry (28.0%), although more would look for a different job (14.2%) than a similar job (13.8%). An additional 12.9% would look in a different industry, with 8.6% who would look for a different job and 4.3% who would look for a similar job. Another 12.0% would look for a new job within the same company. A small portion (3.7%) planned to return to school to pursue another degree, while 14.2% were unsure of their future plans. Almost one-third (29.2%) did not plan to switch jobs.

Research Questions

1. Is there a difference in satisfaction between SPM and SD alumni?

To determine if School of Print Media (SPM) alumni were unique in their responses, we included a control group of RIT School of Design (SD) alumni in the research. First, we tested whether there was a difference in overall job satisfaction. There was not a statistically significant difference in overall satisfaction between the two groups, although SPM alumni had a somewhat lower average satisfaction than SD graduates (mean of 2.33 vs. 2.22, $p=0.250$).⁸

However, statistically significant differences in satisfaction were found between the graduates of the two programs in two job facet categories: satisfaction with continuing education/in-service programs and satisfaction with work environment or work culture (see Table 3 below). In both cases, SPM graduates had significantly lower average satisfaction scores than SD graduates.

Table 3. Categorical Differences in Satisfaction

Job Facet	SD Mean*	SPM Mean*	P value
Support for continuing education/in-service programs	2.64	2.86	0.023
Work environment or work culture	2.03	2.29	0.002

* Five point scale where 1 = Very Satisfied and 5 = Very Dissatisfied. Higher numbers therefore correspond to lower satisfaction.

⁸ - Ranked on a seven-point scale where 1 corresponded to “Completely Satisfied” and 7 corresponded to “Completely Dissatisfied.” Higher numbers therefore correspond to lower satisfaction.

2. Within the SPM alumni population, are there differences in overall satisfaction by demographic groups as defined by generation, gender, or salary level?

To test whether there are any generational differences in satisfaction, we grouped SPM alumni into three different age categories: 20-29 years of age, 30-44 years of age, and 45 or more years of age. Although there is a trend that shows a higher level of satisfaction for older workers, no statistically significant differences in overall satisfaction were found among these age groups (ANOVA, $F=2.675$, $p=0.070$, see Figure 4 below).

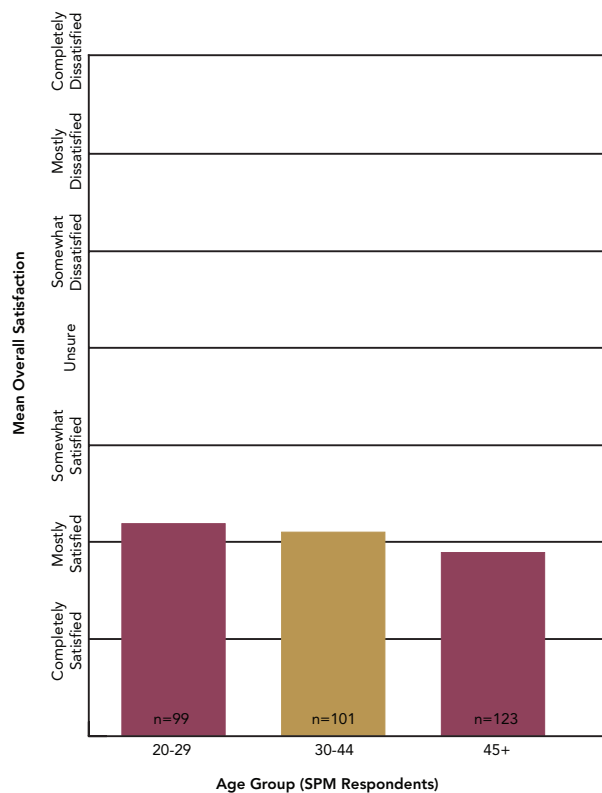


Figure 4. Satisfaction comparison of mean satisfaction by age group
Average job facet satisfaction ratings by age group are found in Table 4. An analysis of variance was computed on each facet with age groups as the independent measure. Of all the job facets, only four were found to be statistically significant:

- Opportunity to be creative (oldest age group most satisfied),
- Personal gratification you feel from doing your job (oldest age group most satisfied),
- Ability to balance work and the rest of your life (oldest age group most satisfied), and
- Potential for career/professional advancement (youngest age group most satisfied).

Consistent with the stereotypes of Gen Y, the younger employees were more dissatisfied than the older groups on three of the four facets.

Table 4. Comparison of SPM mean job facet satisfaction by age group, ordered by mean total satisfaction⁹

Facet	Overall SPM	20-29	30-44	45+
Relationships with coworkers	1.85	1.94	1.87	1.76
Quality of service/product provided/produced	1.87	1.96	1.86	1.80
Flexibility to do your work when and how you like	1.96	2.05	2.00	1.84
Organization's goal/mission/vision	2.00	1.93	2.00	2.05
Organization's ethical standards	2.00	2.02	2.00	1.99
Level of technology employed at the company	2.08	2.13	2.16	1.97
Opportunity to be creative*	2.09	2.30	2.13	1.88
Relationship with immediate supervisor/boss	2.10	2.16	2.03	2.11
Human diversity (gender, ethnicity)	2.11	2.24	2.02	2.08
Level of challenge in work	2.11	2.24	2.06	2.04
Personal gratification you feel from doing your job*	2.11	2.34	2.08	1.95
Job security	2.21	2.21	2.20	2.22
Respect by upper management	2.25	2.21	2.21	2.31
Ability to balance work and the rest of your life*	2.26	2.41	2.33	2.07
Proximity of work to your home	2.29	2.22	2.41	2.23
Work environment or work culture	2.29	2.39	2.25	2.24
Fringe benefits	2.51	2.54	2.37	2.59
Effectiveness of organizational leadership	2.58	2.72	2.51	2.52
Salary	2.71	2.85	2.59	2.70
Potential for career/professional advancement*	2.75	2.54	2.75	2.94
Amount of on-the-job stress	2.84	2.93	2.88	2.73
Support for continuing education/in-service programs	2.86	2.97	2.77	2.85
Accessibility/proximity of childcare services	2.99	2.97	3.04	2.96

*The differences among the categories for these facets are statistically significant ($p=0.003$, 0.005 , 0.024 , and 0.032 , in order from top to bottom).

Statistically significant differences in overall job satisfaction were found between gender groups (ANOVA, $F=5.355$, $p=0.021$) and between salary levels (ANOVA, $F=5.015$, $p<0.0001$). In terms of gender, females were generally less satisfied with their jobs (2.54/7) than males (2.23/7). In terms of salary levels, those with higher salaries were more satisfied, as shown in Figure 5.

9 - The job facet satisfaction measures were measured on a five-point scale, where 1 corresponded to total satisfaction and 5 corresponded to total dissatisfaction. Therefore, lower numbers correspond to higher levels of satisfaction.

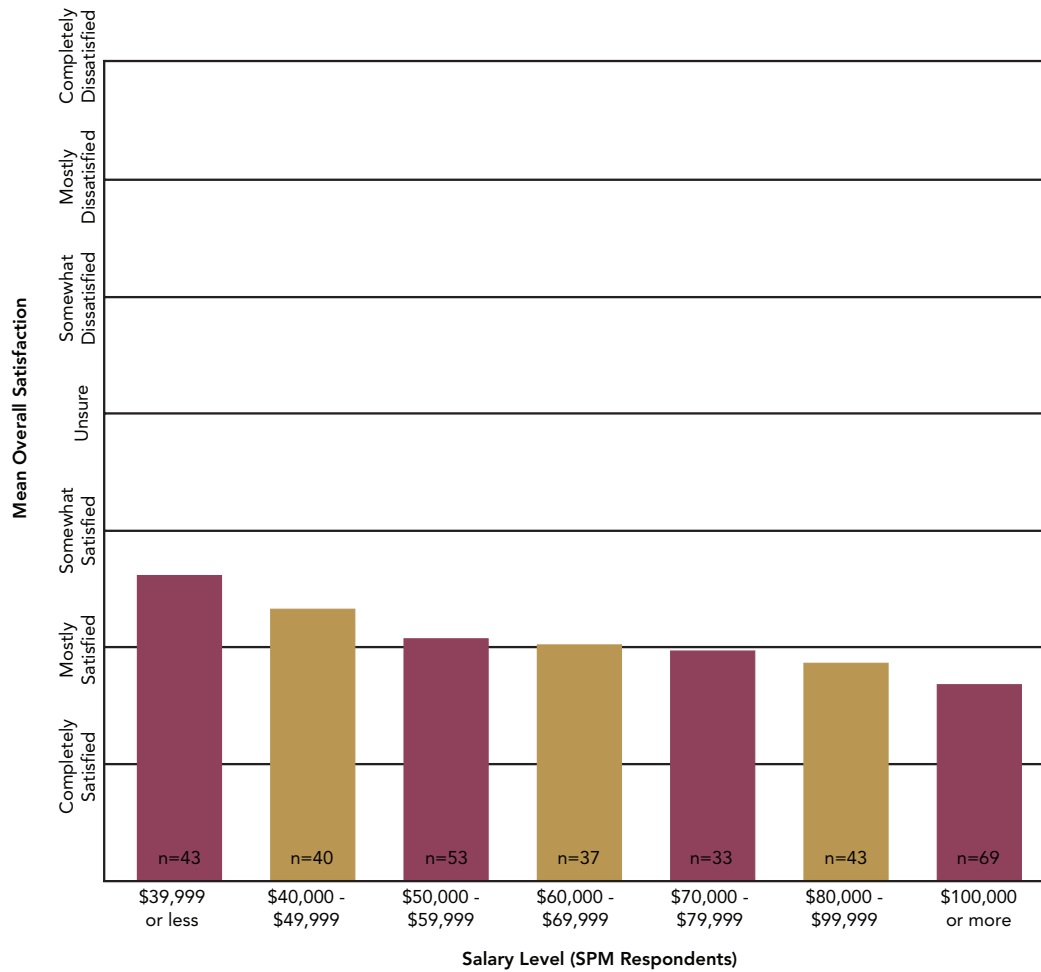


Figure 5. Satisfaction comparison of mean satisfaction by salary level¹⁰

10 - Salary level groupings were created in order to adjust for low numbers of respondents (n) in certain responses. Original categories (as given on the survey) and number of respondents were as follows: \$14,999 or less: 6, \$15,000 - \$19,999: 0, \$20,000 - \$29,999:10, \$30,000 - \$39,999:27, \$40,000 - \$49,999:40, \$50,000 - \$59,999:53, \$60,000 - \$69,999:37, \$70,000 - \$79,999:33, \$80,000 - \$89,999:28, \$90,000 - \$99,999:15, \$100,000 or more: 69.

3. What are the predictors of overall job satisfaction?

Correlates of Overall Job Satisfaction

The first regression analysis was conducted using the job facet satisfaction measures as predictors for overall satisfaction. Results of the regression were as follows: an *r* value of 0.720, which indicates that a strong correlation exists. The *r*² value of 0.518 and the *adjusted r*² value of 0.478 indicate that 47.8% of the variation in overall job satisfaction can be explained by the job aspect satisfaction measures.¹¹ An ANOVA test revealed that this relationship was statistically significant, with *F*=12.853 and *p*<0.0001.

Table 5 reveals the job aspect satisfaction scale items that were statistically significant predictors of overall satisfaction. The five items were: Level of satisfaction with: **1) Personal gratification you feel from doing your job** (beta=0.231); **2) Salary** (beta=0.188); **3) Opportunity to be creative** (beta=0.170); **4) Organization’s goals/mission/vision** (beta=0.147); and **5) Level of challenge in work** (beta=0.125).

Table 5. Significant job facet measure predictors of overall satisfaction

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
(Constant)	-.582	.240		-2.424	.016
Level of satisfaction with: Organization’s goals/mission/vision	.176	.074	.147	2.368	.019
Level of satisfaction with: Level of challenge in work	.150	.070	.125	2.137	.034
Level of satisfaction with: Personal gratification you feel from doing your job	.286	.077	.231	3.716	.000
Level of satisfaction with: Opportunity to be creative	.204	.070	.170	2.925	.004
Level of satisfaction with: Salary	.212	.056	.188	3.767	.000

The second regression analysis was conducted using three demographic items as predictors for overall satisfaction. The demographic items tested were gender, age, and salary. Results of the regression were as follows: an *r* value of 0.297, which indicated that a correlation existed, although the relationship was relatively weak. The *r*² value of 0.088 and the *adjusted r*² value of 0.079 indicates that between 7.9% and 8.8% of the variation in overall job satisfaction can be explained by these demographic items. An ANOVA test revealed that this relationship was statistically significant, with *F*=9.947 and *p*<0.0001. However, salary was the only item shown to be a statistically significant predictor in the model (beta=-0.290, *p*<0.0001).

The third regression analysis was conducted using the significant job facet satisfaction measures and the significant demographic item as predictors for overall satisfaction. This resulted in an *r* value of 0.713, an *r*² of 0.508, and an *adjusted r*² of 0.499 (ANOVA,

¹¹ - When the *r*² value is greater than 0.50, the *adjusted r*² value is used instead.

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F=53.090, $p < 0.0001$). This indicates that 49.9% of the variation in overall job satisfaction can be explained by these six factors. Table 6 below shows that these six factors were all statistically significant, with all betas greater than absolute 0.1.

Table 6. Significant predictors of overall satisfaction

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
(Constant)	.195	.257		.761	.447
Level of satisfaction with: Organization's goals/mission/vision	.287	.054	.235	5.326	.000
Level of satisfaction with: Level of challenge in work	.126	.063	.103	2.000	.046
Level of satisfaction with: Personal gratification you feel from doing your job	.330	.067	.261	4.918	.000
Level of satisfaction with: Opportunity to be creative	.230	.060	.187	3.822	.000
Level of satisfaction with: Salary	.197	.051	.174	3.903	.000
Annual income from current job:	-.056	.019	-.128	-2.952	.003

4. What predicts the intention to change industries?

Among SPM alumni, it appears that overall job satisfaction was important in determining future career plans. The difference in overall satisfaction between career planning categories was statistically significant (ANOVA, $F= 8.9, p < .0001$). As shown below in Figure 6, those who had the lowest average satisfaction scores planned to “Return to school to pursue another degree” (mean satisfaction score of 3.08), “Look for a different job within a different company in a different industry” (mean = 2.96), and “Look for a different job within a different company in a similar industry” (mean = 2.91). This indicates that the most dissatisfied graduates are possibly looking to change their level/rank or field of work, although they may or may not also change industries as a result.

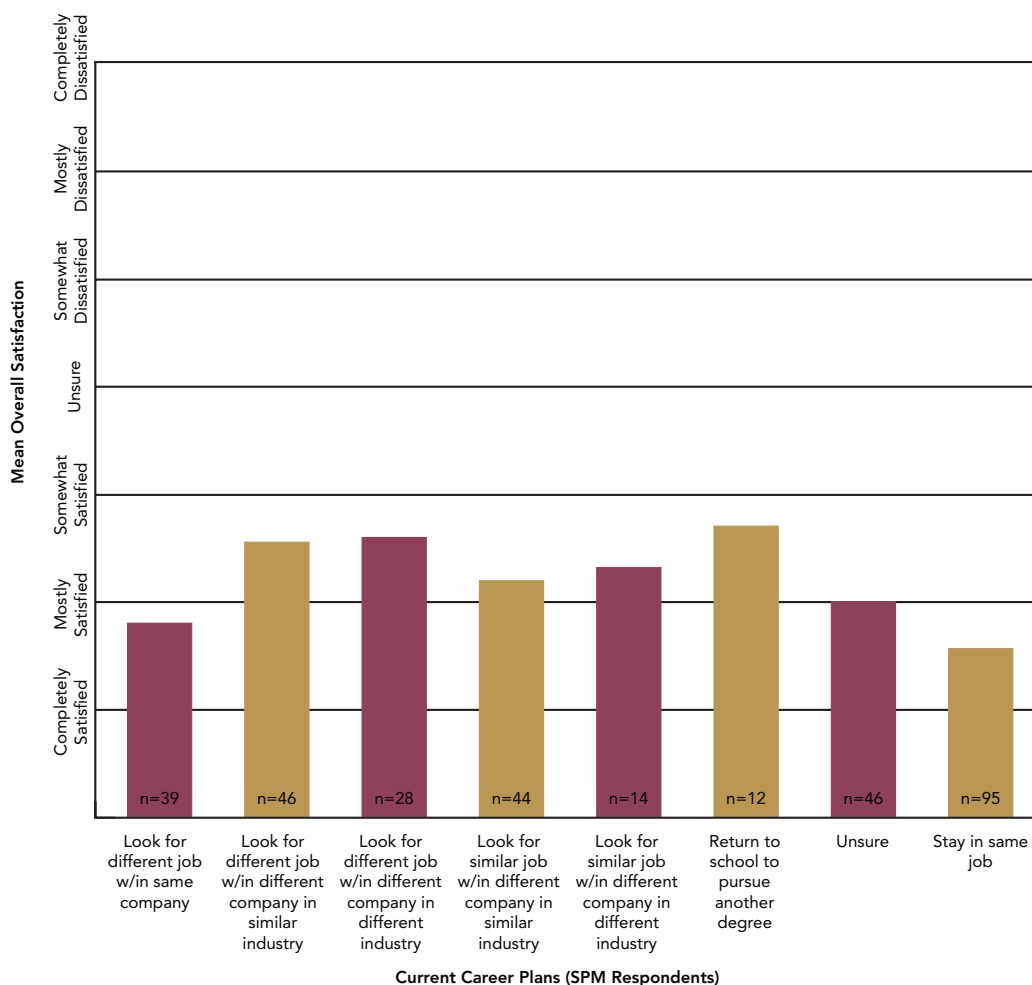


Figure 6. Comparison of mean satisfaction among future career plan responses

Among SPM graduates, it appears that the fulfillment of employer promises upon hire was also important in determining future career plans. As shown below in Table 7, respondents who felt that their employer had not fulfilled the promises made to them upon hire tended to plan to leave the firm, and a few may also leave the industry. This

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indicates that companies who do not fulfill promises to their employees are more likely to lose them.

Table 7. Comparison of employer promise fulfillment to future career plan responses

Future Career Plans	Promises by Employer Met	Promises by Employer Unmet
Stay at current firm	38.46%	8.16%
Stay in current industry but change firm	43.08%	63.27%
Change current industry and firm	18.46%	28.57%
Total	65	49

Discussion of Findings

Summary of Results

The results can be summarized as follows:

- The majority of School of Print Media (SPM) respondents (87.9%) were employed, and over half of them (72.3%) worked at “traditional” graphic arts companies such as commercial printers, publishers, advertisers, in-house marketing or printing departments, financial printers, printing equipment manufacturers, paper and printing supplies, etc.
- Most SPM respondents (62.2%) worked at large companies with over one hundred employees. Additionally, most of the companies where SPM respondents were employed have been in business for at least 20 years (71.9%).
- Before starting with their current employer, SPM respondents were likely to have worked for more than three other employers (57.9%). This level of experience is reflected in the fact that 21.3% of respondents earned \$100,000 or more a year.
- A high percentage of SPM respondents had a job that is related to their most recent degree (60.7%). More than half (59.4%) of SPM respondents believed that their experiences in school helped to prepare them for their jobs, and 60.7% believed that the graphic arts degree they received is important to their employers. Additionally, most SPM respondents (78.2%) believed that they have enough training and education to get ahead in their careers.
- Almost all SPM respondents (90.4%) are satisfied with their job overall. However, 36.3% still plan to actively seek a new job in the next year. In a separate question regarding what the next steps in their career would be, 52.9% do plan to seek another job in the future, although not necessarily in the next year. Those who plan on making a job change are likely to stay in the same industry (28.0%), while an additional 12.9% will look in a different industry. Another 12.0% will look for a new job within the same company.
- When comparing overall job satisfaction between School of Design (SD) and SPM respondents, there was no statistically significant difference. There were statistically significant differences between the two groups for only two job facet satisfaction measures: the level of satisfaction with support for continuing education/in-service programs and work environment or work culture. In both instances, SPM respondents had lower average satisfaction scores than did SD respondents.
- In terms of demographic differences within overall job satisfaction for the SPM sample, no statistically significant differences were found for age groups (generations). However, differences among age groups for four of the 23 job facet satisfaction scores were found to be statistically significant. Consistent with the

stereotypes of Gen Y, the younger employees were more dissatisfied than the older groups on three of the four facets. Additionally, differences in overall job satisfaction were found for both gender and salary groups, with females being less satisfied than males and those with higher salaries being more satisfied than those with lower salaries.

- A regression analysis of the predictors of overall job satisfaction for SPM respondents revealed six pertinent correlating factors that account for 47.8% of the variation in overall job satisfaction. These six factors are shown below (in order by beta):
 - Satisfaction with personal gratification you feel from doing your job,
 - Satisfaction with the organization's goals/mission/vision,
 - Satisfaction with the opportunity to be creative,
 - Satisfaction with salary,
 - Absolute salary amount, and
 - Satisfaction with level of challenge in work.
- An analysis to determine the likelihood of changing industries for the SPM sample revealed that overall job satisfaction and employer promise fulfillment are important factors in the likelihood to look for jobs at different companies. Within the SPM respondents who planned to change companies in the future (n=85), 30.59% also planned to change industries.

Lessons for Employers

The results have implications for printing and publishing employers who are seeking new and possibly younger employees for their businesses. A starting point is to understand the factors that contribute to overall job satisfaction of employees. The results from this research suggest that the following are important:

- Personal gratification you feel from doing your job,
- The organization's goals/mission/vision,
- The opportunity to be creative,
- The level of challenge in work, and
- The actual salary received.

If employees do not feel that their jobs are worthwhile, that they have the opportunity to be creative within their job, that they are being challenged by what they do, that they are being compensated accordingly for the work that they do, or that the company is going in a viable or worthwhile direction, their overall job satisfaction will suffer as a result.

In terms of overall job satisfaction, younger employees were not statistically different in their attitudes when compared to older employees. There were significant differences found on specific job facet measures, but only on four of the 23 facets measured. The age differences found on job facets were consistent with prior research in that they deal with meaningful work and work/life balance. However, where age effects were found, the absolute differences between the highest and lowest groups were less than 0.5 scale points. Moreover, there were more similarities than differences by age on attitudes towards level of challenge of the work, flexibility to do the work, relationships with coworkers, satisfaction with their immediate supervisors, and salary. These results lend credence to the critics who claim that the generational differences among workers have been exaggerated.

How, then, can employers seek to improve job satisfaction? Some suggestions from the literature review include making sure that the person-job fit and/or person-organization fit are appropriate. Recruiting tactics could include realistic job previews, such as using co-ops or internships, to determine if potential employees will derive personal gratification from the job. Another tactic is providing more information about the values, mission, vision, and goals of the organization during the interview process. Although most companies provide some of this information on their marketing materials and/or Web site, words alone do not convey the true “personality” of a company. It is important to let the interviewee know how the company works so that they can assess for themselves whether or not they think they will fit.

Increasing the level of employee “buy-in” to the organization’s goals, mission, and vision may also be important for increasing overall job satisfaction. This could be enacted by senior executive “briefings” on the current goals, mission, and vision in the form of face-to-face meetings where employees are allowed to provide input to help create the organization’s goals, mission, or vision. This may not be feasible in very large companies, and some CEOs are using current communications technologies (such as blogs) to reach a large number of employees.

Work design is also important. Do employees have enough challenge in their jobs? Are they given the opportunity to be creative in determining how they accomplish their tasks? These are questions that should be asked when conducting annual reviews to determine if changes need to be made.

The level of satisfaction with salary and the actual salary received were also correlated to overall job satisfaction. In order to make sure that employees are being compensated appropriately for their level of experience and/or job type, employers should conduct industry benchmarking studies of pay rates at companies who have the performance level that the company wishes to aspire to. These benchmarking studies are also provided by some trade associations.

Support for Prior Research

A comparison of our results to the research discussed in the literature review revealed broad support for the generally accepted principles. First, we'll examine the explanatory factors in overall job satisfaction. Our results showed that salary received, the opportunity to be creative, the level of challenge in work, and the personal gratification felt from doing one's job were shown to correlate to overall job satisfaction in our research. These may be part of the "job level" variable shown to impact satisfaction in prior research.

"Work culture" was also a predictor of job satisfaction in prior research. Our data showed that satisfaction with the organization's goals/mission/vision predicted overall job satisfaction. If one considers work culture to be affected by or derived from the organization's goals/mission/vision, our results are consistent with the work of Testa (1999), who showed that agreement with the organization's vision was a predictor of overall job satisfaction. Additionally, the concept of person-culture fit as discussed by O'Reilly et al. (1991) and Judge and Bretz (1992) would also agree with our findings. Person-organization fit is defined by O'Reilly et al. (1991) as a combination of the motives for joining the organization and the requirements of the job, whereas Judge and Bretz (1992) define it as the level of value congruence between the person and the organization. In both cases, person-organization fit was shown to predict overall job satisfaction. Our findings appear to agree with this research, as the first two correlates of overall job satisfaction are level of satisfaction with personal gratification from doing one's job and the organization's goals/mission/vision, respectively.

Moreover, we found that personal gratification was the strongest correlate of overall job satisfaction. This is consistent with the work of Savery (1996) who found that satisfaction with intrinsic satisfiers/motivators was important to determining the likelihood of leaving the organization. Our findings showed that satisfaction (or the lack thereof) was a determinant of the intention of leaving the organization. Ergo, the level of personal gratification from doing a job does impact the intention to leave the organization. This is also consistent with the findings of other research where overall job satisfaction was shown to predict turnover intentions, such as the work of Rust et al. (1996), Wanous and Lawler (1972), and Oshagbemi (2000).

Our findings did not support other prior research. First, many other studies show that satisfaction increases with age. Though our results were not statistically significant, we did reveal a trend in the predicted direction. However, we did find differences in satisfaction by gender and by salary level. Salary level may be a function of level/rank in the organization and/or age, but this relationship was not specifically discussed in the literature. However, salary level's impact on satisfaction (and therefore on intentions to leave the organization) may be best illustrated in the research conducted by Watson Wyatt Worldwide and WorldatWork (2007). Base pay was found to be among one of the most important reasons for joining or leaving an organization, as shown in Figures 2 and 3. Lastly, the level of satisfaction with the amount of on-the-job stress was not found to correlate with overall job satisfaction for SPM respondents. This is not consistent with

some of the previous research on workplace stress. One example of this is the work of Fairbrother and Warn (2003), who found that high levels of stress are associated with low levels of job satisfaction and are also predictive of a greater propensity to leave the organization.

In sum, most of our salient findings are consistent with the model shown in Figure 1 of the factors that may impact job satisfaction and the intention to stay or to leave.

Limitations of the Research

The research design was a one-time survey that produced a profile of the two sample groups (SPM and SD). This sample grouping may not be representative of all college-educated employees in the graphic arts industry. The respondents have actively decided to remain in contact with their alma mater and may reflect those who are the most successful. Those that have left the industry and not remained in contact with RIT were not included in the sample. This may have resulted in self-selection bias.

Information collected in the study was self-reported. This may have resulted in some inaccuracies in reporting. Survey data was not verified with respondents or with their employers, as such attempts to verify data would have nullified the promise of confidentiality. Survey respondents also had the option to leave questions unanswered, which affected the data analysis and the conclusions that may be drawn from it by reducing sample sizes in certain categories. Additionally, this type of cross-sectional design does not allow for the determination of any cause and effect relationships.

Recommendations made are based on general best business practices, and should not be actualized without further company-specific research and analysis. The literature review was limited to the resources available from the databases at RIT (which, although extensive, are not all-inclusive), and was also conducted of studies written in English only. This may have excluded some research in other languages that would have been pertinent to this study.

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Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Q2: Gender:					
Net Answering	n=419*	n=117	n=131	n=169	n=301
Male	70.4%	45.3%	70.2%	87.6%	35.9%
Female	29.6%	54.7%	29.8%	12.4%	64.1%
Q3: What was your age on your last birthday?					
Net Answering	n=425	n=118	n=133	n=174	n=303
19 or younger	--	--	--	--	--
20 - 24 years	8.7%	31.4%	--	--	8.3%
25 - 29 years	19.1%	68.6%	--	--	27.4%
30 - 34 years	11.3%	--	36.1%	--	17.5%
35 - 39 years	9.4%	--	30.1%	--	20.8%
40 - 44 years	10.6%	--	33.8%	--	13.9%
45 - 49 years	11.8%	--	--	28.7%	8.6%
50 - 54 years	11.1%	--	--	27.0%	3.0%
55 - 59 years	4.9%	--	--	12.1%	0.3%
60 - 64 years	7.5%	--	--	18.4%	0.3%
65 or older	5.6%	--	--	13.8%	--
Q4: What is your country of birth/origin?					
Net Answering	n=424	n=118	n=132	n=174	n=305
United States	90.8%	88.1%	90.9%	92.5%	92.1%
North and Latin America	3.1%	0.8%	4.5%	3.4%	2.3%
South America	0.2%	--	0.8%	--	0.7%
Europe	1.9%	--	2.3%	2.9%	1.0%
Asia	3.1%	9.3%	1.5%	0.6%	3.9%
Africa	0.7%	1.7%	--	--	--
Middle East	0.2%	--	--	0.6%	--
Q5: Year of most recent graduation from a college/university:					
Net Answering	n=425	n=118	n=133	n=174	n=305
Prior to 1950	0.2%	--	--	0.6%	--
1950-1954	0.9%	--	--	2.3%	--
1955-1959	0.7%	--	--	1.7%	--
1960-1964	3.1%	--	--	7.5%	--
1965-1969	3.5%	--	--	8.6%	--
1970-1974	4.0%	--	--	9.8%	--

*There may be differences between Total SPM and the total of the SPM age groups, as not all respondents answered all questions.

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
1975-1979	8.7%	--	--	21.3%	0.3%
1980-1984	12.0%	--	--	29.3%	5.6%
1985-1989	8.2%	--	17.3%	6.9%	13.1%
1990-1994	8.7%	--	24.1%	2.9%	15.1%
1995-1999	8.9%	--	23.3%	4.0%	17.4%
2000-2004	21.4%	38.1%	30.8%	2.9%	30.8%
2005-2008	19.5%	61.9%	4.5%	2.3%	17.7%
Q6: Degree achieved in that year?					
Net Answering	n=421	n=116	n=133	n=171	n=304
Bachelors	68.2%	69.8%	60.9%	73.1%	79.9%
Masters	28.5%	29.3%	39.1%	19.3%	17.1%
Doctorate (PhD)	0.5%	0.9%	--	0.6%	0.3%
Other degree or certificate	2.9%	--	--	7.0%	2.6%
Other degree or certificate coded:					
Net Answering	n=12	n=0	n=0	n=12	n=8
Associates	58.3%	--	--	58.3%	37.5%
Did not complete other degree	16.7%	--	--	16.7%	25.0%
Certificate of Education	--	--	--	--	12.5%
BFA	--	--	--	--	12.5%
Degree is underway, not yet completed	--	--	--	--	12.5%
Printing Diploma, RIT	16.7%	--	--	16.7%	--
Printing Diploma, Other University	8.3%	--	--	8.3%	--
Q7: What was your field of study/major?*					
Net Answering	n=423	n=118	n=132	n=173	n=302
Graphic Design	0.2%	0.8%	--	--	58.9%
Interior Design	--	--	--	--	9.6%
Industrial Design	--	--	--	--	12.9%
New Media Design & Imaging	--	--	--	--	2.3%
Communications Design	--	--	--	--	3.6%
Unable to be coded/Miscellaneous	0.5%	--	--	1.2%	0.7%
Education	1.2%	--	0.8%	2.3%	0.7%
Computer Graphics Design	0.6%	--	--	0.6%	4.0%
Business/MBA	7.3%	7.6%	9.8%	5.2%	0.7%
Art Education & Art Therapy	0.2%	--	0.8%	--	1.0%
Professional Skills Disciplines	--	--	--	--	0.7%
Packaging Science & Packaging Design	0.5%	0.8%	0.8%	--	1.0%
Apparel Manufacturing & Marketing	--	--	--	--	0.3%
Computer Animation	--	--	--	--	0.3%

**Answers have been coded.

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Fine & Applied Arts	0.2%	--	--	0.6%	1.3%
Illustration	--	--	--	--	1.0%
Architecture	--	--	--	--	0.7%
Electronic Media Design	--	--	--	--	0.3%
Printing Management, Sciences, & Technology	41.6%	23.7%	47.0%	49.7%	--
New Media Publishing	5.9%	21.2%	--	--	--
Sciences (Physics, Imaging Science, etc.)	1.2%	1.7%	1.5%	0.6%	--
Graphic Media Communications/Publishing	7.8%	25.4%	2.3%	--	--
Computer Science/IT	1.2%	0.8%	1.5%	1.2%	--
Electronic Publishing	1.4%	--	2.3%	1.7%	--
Printing Systems & Industrial Engineering	1.2%	--	1.5%	1.7%	--
Graphic Arts Systems/Publishing	4.3%	1.7%	9.8%	1.7%	--
Printing or Graphic Arts (unspecified)	15.4%	2.5%	11.4%	27.2%	--
Advertising Design	0.2%	--	--	0.6%	--
Graphic Arts & Photography	1.2%	--	--	2.9%	--
Publishing & Printing	0.9%	--	--	2.3%	--
Imaging Systems Management	0.2%	0.8%	--	--	--
Newspaper Production/Operations Management	0.9%	--	3.0%	--	--
Print Media	5.4%	12.7%	6.1%	--	--
Production & Operations Management	0.5%	--	0.8%	0.6%	--
Photography	0.2%	--	0.2%	--	--
Q8: Current work status (select one):					
Net Answering	n=428	n=118	n=133	n=174	n=305
Employed Full-time	76.4%	79.7%	85.0%	67.8%	73.1%
Self-employed/Entrepreneur	6.5%	2.5%	6.8%	9.2%	12.5%
Caring for my family/home Full-time	0.5%	--	1.5%	--	3.3%
Serving in the military	0.2%	--	0.8%	--	0.3%
Employed Part-time	0.7%	--	--	1.7%	3.0%
Contract/freelance work - Full-time	1.2%	3.4%	0.8%	--	1.3%
Contract/freelance work - Part-time	1.4%	2.5%	0.8%	1.1%	2.0%
Continuing my education part-time while employed	0.7%	2.5%	--	--	1.3%
Continuing my education part-time	--	--	--	--	0.3%
Continuing my education full-time while employed	0.9%	1.7%	0.8%	0.6%	0.7%
Continuing my education full-time	0.9%	2.5%	--	0.6%	--
Unemployed, seeking employment	2.8%	4.2%	3.0%	1.7%	2.3%
Unemployed, not seeking employment	0.5%	0.8%	0.8%	--	--
Retired	7.2%	--	--	17.2%	--

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
START OF CURRENTLY EMPLOYED SURVEY QUESTIONS					
Q9: Current job title:**					
Net Answering	n=359	n=106	n=120	n=133	n=265
Art Director/Creative Director	--	--	--	--	11.7%
Graphic Designer	0.6%	--	--	1.5%	16.2%
Senior Graphic Designer	0.8%	1.9%	--	0.8%	8.7%
Freelance Designer	0.8%	1.9%	0.8%	--	3.0%
President/Owner	7.5%	--	7.5%	13.5%	6.4%
Vice President/Department Head	8.1%	2.8%	9.2%	11.3%	3.8%
Designer - Other (Industrial, Interior, etc.)	1.7%	3.8%	1.7%	--	9.4%
Multimedia Design/Production	0.3%	0.9%	--	--	2.3%
Director/Manager - Other (Multimedia, etc.)	1.4%	--	1.7%	2.3%	6.0%
Account Manager/Executive	9.5%	14.2%	5.8%	9.0%	0.4%
Assistant/Associate Art/Creative Director	--	--	--	--	3.0%
Senior Designer - Other (Industrial, Interior, etc.)	1.1%	0.9%	1.7%	0.8%	3.4%
Miscellaneous/Other	4.7%	2.8%	4.2%	6.8%	6.4%
Instructor/Educator/Teacher	2.2%	2.8%	2.5%	1.5%	3.8%
Professor	0.8%	--	--	2.3%	1.1%
Assistant/Associate Professor	1.1%	--	0.8%	2.3%	1.5%
Quality Assurance/Process Engineer	2.5%	2.8%	2.5%	2.3%	--
Operations/Production Management	9.2%	9.4%	10.8%	7.5%	1.1%
Purchasing/Print Buying	2.2%	1.9%	3.3%	1.5%	--
Director of Marketing/Marketing Manager	1.7%	3.8%	0.8%	0.8%	3.0%
Manager - Other/Miscellaneous	1.7%	--	4.2%	0.8%	2.6%
Publishing/Editing	2.2%	0.9%	3.3%	2.3%	--
Research Analyst	0.8%	1.9%	0.8%	--	--
Sales Manager	2.5%	1.9%	0.8%	4.5%	--
Sales Representative/Associate	4.2%	2.8%	5.0%	4.5%	0.4%
Service/Solution Representative/Specialist	3.1%	5.7%	1.7%	2.3%	0.4%
Service/Solution Manager	1.1%	1.9%	1.7%	--	--
Marketing Analyst	0.8%	--	1.7%	0.8%	--
Systems Engineer/Consultant	1.1%	0.9%	2.5%	--	0.4%
Software/IT Specialist/Developer/Engineer	3.1%	3.8%	1.7%	3.8%	1.5%
Estimator	3.1%	1.9%	3.3%	3.8%	--
Consulting	2.5%	5.7%	--	2.3%	--
Color Scientist	0.6%	--	0.8%	0.8%	--
Research & Development	0.3%	--	--	0.8%	--
Project Manager/Coordinator	2.5%	2.8%	3.3%	1.5%	0.8%

**Answers have been coded.

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Program Manager/Director	0.6%	0.9%	0.8%	--	--
Prepress Manager	1.4%	1.9%	1.7%	0.8%	0.4%
Prepress Specialist	2.2%	2.8%	3.3%	0.8%	--
Marketing Communications Specialist	1.1%	1.9%	0.8%	0.8%	0.8%
Chief Officer/Corporate Director	1.1%	--	1.7%	1.5%	--
Customer Service Representative	2.8%	4.7%	2.5%	1.5%	--
Desktop Support/Publisher	0.6%	--	1.7%	--	0.4%
Database Manager/Analyst	1.1%	2.8%	0.8%	--	--
Education - Other (Professional Staff, etc.)	2.8%	3.8%	1.7%	3.0%	1.1%
Press Operator/Maintenance	0.6%	0.9%	0.8%	--	--
Q10: Type of firm where you are employed:					
Net Answering	n=361	n=106	n=118	n=135	n=262
Commercial printing	29.6%	29.2%	30.5%	29.6%	0.8%
Publishing	8.3%	9.4%	10.2%	5.9%	5.0%
Advertising	3.9%	5.7%	3.4%	3.0%	10.7%
Design firm	1.4%	0.9%	1.7%	1.5%	25.6%
In-house corporate communications/marketing department	3.9%	6.6%	4.2%	1.5%	15.3%
In-house educational/non-profit communications/marketing department	0.6%	--	0.8%	0.7%	5.0%
In-house corporate print shop	1.1%	1.9%	0.8%	0.7%	0.4%
In-house educational/non-profit print shop	3.3%	2.8%	3.4%	3.7%	0.4%
Other (please specify)	47.6%	43.4%	44.9%	53.3%	37.0%
(a) Coded Other Firm Responses					
Net Answering	n=172	n=46	n=53	n=72	n=97
Direct Marketing/Mail	1.2%	2.2%	--	1.4%	--
Education	14.5%	13.0%	9.4%	19.4%	20.6%
Printing Product Manufacturer	3.5%	4.3%	3.8%	2.8%	1.0%
Government & Government Agencies	5.2%	6.5%	7.5%	2.8%	4.1%
Document Services	2.9%	6.5%	1.9%	1.4%	--
Consumer Products	4.7%	4.3%	9.4%	1.4%	3.1%
Consulting & Recruiting	8.7%	19.6%	1.9%	6.9%	1.0%
Paper & Printing Supplies	4.7%	4.3%	5.7%	4.2%	--
Marketing (Unspecified)	2.3%	6.5%	--	1.4%	3.1%
Software & IT	8.1%	4.3%	9.4%	9.7%	4.1%
Prepress	2.3%	--	3.8%	2.8%	1.0%
Financial Printing	3.5%	--	9.4%	1.4%	--
Package & Label Printing	7.0%	6.5%	7.5%	6.9%	--
Self-employed	1.2%	2.2%	1.9%	--	7.2%

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Miscellaneous/Non-printing	12.2%	8.7%	9.4%	16.7%	20.6%
Printing Equipment Manufacturer	7.6%	6.5%	5.7%	9.7%	--
Manufacturing (General, Non-printing)	2.3%	2.2%	1.9%	1.4%	6.2%
Digital Printing	3.5%	2.2%	3.8%	1.7%	--
Retail	2.3%	--	3.8%	1.1%	9.3%
Book Manufacturing	1.2%	--	1.9%	0.6%	--
Health Care & Hospitals	0.6%	--	1.9%	--	--
Digital Media Production	--	--	--	--	7.2%
Internet Marketing/Web Design	--	--	--	--	3.1%
Architecture	0.6%	--	--	0.6%	4.1%
Engineering	--	--	--	--	2.1%
Law Firm	--	--	--	--	2.1%
Printing Industry Trade Association	--	--	--	--	--
Q11: Number of employees in the company:					
Net Answering	n=346	n=103	n=113	n=130	n=254
1-5 employees	8.7%	8.7%	8.0%	9.2%	21.7%
6-10 employees	3.8%	2.9%	3.5%	4.6%	8.3%
11-19 employees	4.3%	3.9%	3.5%	5.4%	5.5%
20-49 employees	8.4%	9.7%	6.2%	9.2%	12.2%
50-99 employees	12.7%	11.7%	9.7%	16.2%	9.8%
100-499 employees	24.6%	23.3%	25.7%	24.6%	18.1%
500+ employees	37.6%	39.8%	43.4%	30.8%	24.4%
Q12: Number of years the company has been in business:					
Net Answering	n=349	n=101	n=116	n=132	n=258
1-5 years	9.2%	12.9%	10.3%	5.3%	16.7%
6-10 years	8.0%	9.9%	6.9%	7.6%	11.2%
11-19 years	10.9%	7.9%	11.2%	12.9%	13.2%
20-49 years	27.2%	26.7%	24.1%	30.3%	34.5%
50-99 years	21.8%	22.8%	22.4%	20.5%	12.8%
100-149 years	14.9%	14.9%	13.8%	15.9%	6.6%
150+ years	8.0%	5.0%	11.2%	7.6%	5.0%
Q13: Year you started working for your current employer:					
Net Answering	n=358	n=105	n=119	n=134	n=260
1960-1964	0.3%	--	--	0.7%	--
1965-1969	0.3%	--	--	0.7%	--
1970-1974	0.6%	--	--	1.5%	--
1975-1979	0.3%	--	--	0.7%	--

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
1980-1984	3.1%	--	--	8.2%	1.2%
1985-1989	5.6%	--	4.2%	11.2%	3.8%
1990-1994	6.7%	--	5.0%	13.4%	4.2%
1995-1999	11.2%	--	16.0%	15.7%	12.7%
2000-2004	24.0%	20.0%	29.4%	22.4%	25.8%
2005-2008	48.0%	80.0%	45.4%	25.4%	52.3%
Q14: Have you been working at the same position since starting with this employer?					
Net Answering	n=359	n=107	n=119	n=133	n=261
Yes	66.6%	61.0%	63.9%	68.4%	67.0%
No	33.4%	29.7%	36.1%	31.6%	33.0%
Q15: If no, please provide details:**					
Net Answering	n=121	n=35	n=43	n=43	n=87
Began as intern/part-time/contract, moved to full-time/contract	4.1%	11.4%	2.3%	--	12.6%
Multiple level promotion	37.2%	28.6%	39.5%	41.9%	26.4%
Single level promotion	19.8%	28.6%	18.6%	14.0%	34.5%
Moved to different department(s) internally	29.8%	20.0%	34.9%	32.6%	13.8%
Responsibilities increased	2.5%	5.7%	--	2.3%	4.6%
Changed industry	0.8%	--	--	2.3%	1.1%
Returned to company after working elsewhere	--	--	--	--	2.3%
Other/Miscellaneous	0.8%	2.9%	--	--	3.4%
N/A	1.7%	--	2.3%	2.3%	1.1%
Changed companies	0.8%	--	--	2.3%	--
Changed locations/sites within company as a result of promotion/job change	2.5%	2.9%	2.3%	2.3%	--
Q16: Annual income from current job:					
Net Answering	n=357	n=105	n=119	n=133	n=257
\$14,999 or less	2.0%	2.9%	3.4%	--	4.3%
\$15,000 - \$19,999	--	--	--	--	1.6%
\$20,000 - \$29,999	3.1%	4.8%	2.5%	2.3%	5.4%
\$30,000 - \$39,999	8.4%	15.2%	4.2%	6.8%	12.8%
\$40,000 - \$49,999	12.6%	21.9%	10.9%	6.8%	20.6%
\$50,000 - \$59,999	15.4%	22.9%	12.6%	12.0%	13.6%
\$60,000 - \$69,999	11.5%	20.0%	9.2%	6.8%	12.1%
\$70,000 - \$79,999	11.2%	5.7%	15.1%	12.0%	8.6%
\$80,000 - \$89,999	10.4%	5.7%	14.3%	10.5%	4.7%
\$90,000 - \$99,999	4.2%	--	4.2%	7.5%	5.1%
\$100,000 or more	21.3%	1.0%	23.5%	35.3%	11.3%

**Answers have been coded.

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Q17: Do you hold any other jobs currently?					
Net Answering	n=361	n=107	n=120	n=134	n=266
Yes	12.2%	15.0%	11.7%	10.4%	21.8%
No	87.8%	85.0%	88.3%	89.6%	78.2%
Q18: If yes, how many other jobs/what types of jobs do you hold?					
Net Answering	n=45	n=16	n=15	n=14	n=61
One other full-time job	6.7%	--	20.0%	--	4.9%
One other part-time job	84.4%	93.8%	66.7%	92.9%	77.0%
Two other part-time jobs	6.7%	6.2%	13.3%	--	13.1%
Three or more other part-time jobs	2.2%	--	--	7.1%	4.9%
Q19: Number of employers you have worked for prior to your current job?					
Net Answering	n=333	n=99	n=108	n=126	n=251
0 employers	8.1%	14.1%	6.5%	4.8%	4.0%
1 employer	14.1%	22.2%	14.8%	7.1%	17.1%
2 employers	18.0%	22.2%	18.5%	14.3%	23.5%
3 employers	18.9%	16.2%	20.4%	19.8%	17.9%
4-5 employers	22.8%	18.2%	20.4%	28.6%	20.3%
6+ employers	18.0%	7.1%	19.4%	25.4%	17.1%
Q20: How closely related to your current job is your most recent degree attained?					
Net Answering	n=336	n=100	n=109	n=127	n=254
Highly Related	60.7%	65.0%	58.7%	59.1%	64.2%
Moderately Related	21.7%	19.0%	25.7%	20.5%	21.7%
Slightly Related	8.9%	13.0%	5.5%	8.7%	7.5%
Not at All Related	8.6%	3.0%	10.1%	11.8%	6.7%
Q21: How well did your experiences in school prepare you for your current job?					
Net Answering	n=335	n=100	n=109	n=126	n=255
Exceptionally Well	22.7%	21.0%	21.1%	25.4%	20.4%
More than Adequately	36.7%	43.0%	34.9%	33.3%	37.3%
Adequately	34.0%	31.0%	30.1%	34.1%	36.1%
Less than Adequately	3.3%	3.0%	1.5%	4.8%	3.9%
Poorly	1.2%	1.0%	2.3%	--	0.4%
Not At All	2.1%	1.0%	2.3%	2.4%	2.0%
Q22: How important is your graphic communications degree to your employer? That is, do you believe that having this degree is important for your career with this employer?					
Net Answering	n=334	n=99	n=109	n=126	n=253
Very Important	31.1%	41.4%	28.4%	25.4%	30.8%
Important	29.6%	31.3%	30.3%	27.8%	30.0%
Somewhat Important	20.7%	17.2%	17.4%	26.2%	23.3%
Neutral/No Effect	8.7%	4.0%	11.9%	9.5%	8.3%

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Somewhat Unimportant	1.5%	2.0%	1.8%	0.8%	0.8%
Unimportant	4.8%	1.0%	5.5%	7.1%	3.6%
Very Unimportant	3.6%	3.0%	4.6%	3.2%	3.2%
Q23: Do you believe that you have the education and training necessary to get ahead in your job or career?					
Net Answering	n=335	n=101	n=108	n=126	n=254
I have more than enough.	27.2%	27.7%	25.9%	27.8%	33.9%
I have what is needed.	51.0%	57.4%	47.2%	49.2%	41.3%
I need more.	20.0%	12.9%	25.0%	21.4%	22.0%
Don't know/Unsure	1.8%	2.0%	1.9%	1.6%	2.8%
Q24: What were the top 5 things you learned in your college experience that have been valuable in your current job?†					
Total Distinct Answers	n=1,247	n=393	n=389	n=465	n=953
Business Skills (Marketing, Finance, etc.)	5.2%	4.3%	5.7%	5.6%	1.2%
Creative Thinking & Learning Skills	1.8%	1.3%	1.3%	2.8%	6.2%
Printing Technologies/Processes/Production	15.9%	14.8%	17.0%	15.9%	2.4%
Software & Computer Skills	4.3%	7.6%	2.8%	2.8%	8.9%
Time Management & Organizational Skills	5.6%	6.4%	6.2%	4.5%	7.0%
Color (Color Theory, Color Management)	3.2%	4.6%	3.1%	2.2%	0.9%
Industry Knowledge & Trends	3.0%	4.3%	2.6%	2.2%	0.1%
Communication & Writing Skills	5.4%	7.4%	3.3%	5.4%	2.8%
Management Skills (including HR)	3.0%	1.5%	2.3%	4.9%	0.2%
Typography & Typesetting	1.5%	0.5%	1.0%	2.8%	4.1%
Estimating, Scheduling, & Budgeting	1.8%	0.8%	2.3%	2.4%	0.3%
Networking & People Skills (i.e., teamwork)	10.6%	8.4%	11.6%	11.6%	9.5%
Professional Skills & Personal Development	6.3%	3.1%	7.7%	8.0%	11.1%
Project Management	1.8%	3.1%	1.3%	1.3%	2.8%
VDP & Digital Printing	2.1%	3.1%	2.6%	0.9%	0.1%
Sales/Selling	1.1%	1.8%	0.8%	0.9%	0.2%
Bindery Technologies/Processes (Finishing)	1.0%	1.0%	1.5%	0.4%	--
Statistics & Quality Control	1.6%	2.0%	1.5%	1.3%	0.1%
Miscellaneous/Other	3.4%	2.8%	3.3%	3.9%	8.3%
Customer Service	0.2%	--	0.8%	--	0.5%
Web Design/Programming	1.0%	1.5%	0.8%	0.9%	1.7%
Product/Packaging Design	--	--	--	--	0.1%
Presentation Skills	0.7%	0.5%	1.3%	0.4%	1.6%
Identity/Branding Concepts	--	--	--	--	0.3%
Co-op/Internship Experience & On-Campus Jobs	1.7%	1.0%	2.1%	1.9%	0.7%

† Answers have been coded. For SPM, there were 285 respondents who filled in at least one answer. For 20-29 year olds, there were 90 respondents who filled in at least one answer. For 30-44 year olds, there were 88 respondents who filled in at least one answer. For 45+ year olds, there were 107 respondents who filled in at least one answer. For SD, there were 221 respondents who filled in at least one answer. "Total Distinct Answers" is the sum of all responses given that were able to be coded.

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Portfolio Creation/Preparation, Resume Creation, Interviewing Skills	0.2%	0.5%	0.3%	--	2.5%
Critical Thinking & Problem Solving	2.8%	2.3%	3.1%	3.0%	2.2%
Technical Skills	2.8%	2.0%	2.6%	3.7%	1.3%
Teaching Skills	--	--	--	--	0.3%
Professors/Learning Process (Hands-On Approach)	1.9%	1.5%	1.8%	2.4%	0.9%
Thesis Project	--	--	--	--	0.1%
Job Exploration & Career Planning	0.4%	0.3%	0.5%	0.4%	0.2%
Research Skills	1.9%	1.5%	1.8%	2.4%	0.4%
Paper, Substrates, Media (Knowledge of)	0.7%	1.0%	0.8%	0.4%	--
File Manipulation/Prepress or Preflighting	2.1%	2.5%	2.6%	1.3%	0.3%
Leadership Skills	1.3%	1.8%	1.3%	0.9%	--
Database Mining and Management	0.3%	0.8%	--	0.2%	--
Specific RIT Class	1.0%	1.8%	0.5%	0.6%	0.9%
RIT Reputation	0.5%	--	0.5%	0.9%	--
Ability to Accept/Use Criticism/Feedback	0.1%	--	0.3%	--	2.5%
Design Skills/Techniques (Layout)	1.0%	1.8%	0.5%	0.9%	12.7%
Attention to Detail/Craftsmanship (Quality of Work)	0.5%	0.5%	0.8%	0.2%	2.7%
Drawing/Drafting Skills	--	--	--	--	1.5%
Q25: Identify 5 things you WISHED you learned during your college experience that you believe would be valuable for your career/advancement:‡					
Total Distinct Answers	n=910	n=276	n=305	n=329	n=834
Broader Career Exploration/Career Planning	1.6%	2.5%	1.0%	1.5%	2.0%
Human Resource Management, Teamwork, Personnel Issues	5.9%	2.9%	4.9%	9.4%	1.7%
Industry History, Knowledge, Trends	3.0%	5.4%	2.6%	1.2%	0.8%
Business Skills (Marketing, Accounting, Management, Etc.)	18.2%	13.0%	19.0%	21.9%	14.9%
Packaging Science & Design	0.7%	0.7%	1.3%	--	0.2%
Technical Skills	0.3%	0.4%	--	0.6%	1.0%
Leadership Skills	0.7%	0.7%	0.7%	0.6%	0.4%
Electronic Prepress & Software Skills	5.1%	4.7%	7.2%	3.3%	6.8%
Selling/Sales Training	3.6%	2.2%	3.9%	4.6%	0.2%
Web Design, Programming, & Development	2.9%	7.2%	1.3%	0.6%	5.9%
VDP & Digital Technologies	1.1%	2.2%	1.0%	0.3%	--

‡ Answers have been coded. For SPM, there were 260 respondents who filled in at least one answer. For 20 - 29 year olds, there were 77 respondents who filled in at least one answer. For 30-44 year olds, there were 85 respondents who filled in at least one answer. For 45+ year olds, there were 98 respondents who filled in at least one answer. For SD, there were 221 respondents who filled in at least one answer. "Total Distinct Answers" is the sum of all responses given that were able to be coded.

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Binding/Finishing	1.5%	2.2%	2.3%	0.3%	0.2%
Materials/Substrates	1.6%	1.4%	2.6%	0.9%	1.3%
Writing/Typing	1.1%	0.4%	1.0%	1.8%	1.4%
Computers, IT, Networking, MIS	3.8%	2.2%	2.6%	6.4%	2.8%
Statistics & Quality Control	2.2%	3.3%	2.0%	1.5%	0.1%
Research Skills	0.3%	--	0.7%	0.3%	0.4%
Project Management	2.0%	1.8%	2.3%	1.8%	1.3%
Workflows & Workflow Analysis	1.2%	0.7%	2.3%	0.6%	0.1%
Miscellaneous/Other	2.4%	1.1%	2.3%	3.6%	3.0%
Design (History, Principles, Process)	1.0%	2.2%	0.3%	0.6%	2.6%
Graduate Study	0.5%	0.4%	1.0%	0.3%	0.2%
Broader Range of Classes/Different Approach to Learning	4.9%	5.4%	4.3%	5.2%	5.5%
Multimedia Skills (Video, Photo, Etc.)	0.3%	0.4%	0.7%	--	2.0%
Networking Skills	2.0%	1.8%	3.0%	1.2%	2.0%
Other Specific Topic (ISO, Bar Codes, etc.)	8.1%	9.4%	6.2%	8.8%	9.5%
Print Processes/Technologies/Production	3.2%	4.3%	2.6%	2.7%	5.2%
Portfolio Creation/Development	--	--	--	--	0.7%
Co-op/Internship/Work Experience	2.6%	2.9%	3.0%	2.1%	6.7%
Branding/Identity Standards	--	--	--	--	0.2%
Budgeting & Estimating	2.2%	2.9%	1.6%	2.1%	1.7%
Time Management & Organizational Skills	1.4%	0.4%	1.3%	2.4%	1.2%
Effective Feedback (How to give and receive it)	0.2%	0.7%	--	--	0.5%
Professional/Workplace Skills (Communication, etc.)	4.0%	3.3%	4.3%	4.3%	5.3%
Realistic Expectations (Salary, Jobs, Etc.)	1.2%	1.1%	1.6%	0.9%	3.7%
Technology/Changes in Technology	0.7%	0.4%	0.7%	0.9%	0.6%
Problem Solving & Critical Thinking Skills	0.7%	0.4%	1.3%	0.3%	0.8%
Presentation Skills & Public Speaking	1.5%	1.8%	1.0%	1.8%	1.6%
Legal & Copyright Issues	0.7%	--	0.7%	1.2%	0.1%
Retirement Planning	--	--	--	--	0.2%
Job Search & Interviewing Skills	0.8%	1.1%	1.0%	0.3%	1.4%
Book Design/Manufacturing/Publishing	0.1%	0.4%	--	--	0.2%
Color (Color Theory, Color Management)	1.0%	1.4%	0.7%	0.9%	0.8%
File Formats & File Management	0.1%	--	0.3%	--	0.4%
Database Theory/Management	1.3%	1.8%	1.3%	0.9%	0.4%
Negotiating Skills	2.1%	2.5%	2.3%	1.5%	1.2%
Typography	--	--	--	--	0.5%

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Q26: Overall, would you say that you are satisfied with your job?					
Net Answering	n=324	n=99	n=101	n=123	n=252
Completely satisfied	17.9%	9.1%	10.9%	30.9%	20.6%
Mostly satisfied	51.5%	57.6%	60.4%	39.0%	53.6%
Somewhat satisfied	21.0%	21.2%	19.8%	22.0%	18.3%
Unsure	2.2%	3.0%	2.0%	1.6%	1.6%
Somewhat dissatisfied	4.3%	6.1%	2.0%	4.9%	3.2%
Mostly dissatisfied	2.8%	2.0%	5.0%	1.6%	2.0%
Completely dissatisfied	0.3%	1.0%	--	--	0.8%
Q27: Please rate your level of satisfaction with aspects of your current job:					
(a) Organization's ethical standards					
Net Answering	n=323	n=99	n=102	n=122	n=246
Very Satisfied	34.7%	29.3%	34.3%	39.3%	42.3%
Satisfied	39.9%	45.5%	40.2%	35.2%	39.4%
Neutral	17.3%	20.2%	17.6%	14.8%	12.6%
Dissatisfied	6.5%	4.0%	6.9%	8.2%	2.4%
Very Dissatisfied	1.5%	1.0%	1.0%	2.5%	3.3%
(b) Organization's goal/mission/vision					
Net Answering	n=323	n=99	n=102	n=122	n=246
Very Satisfied	33.1%	38.4%	30.4%	31.1%	39.4%
Satisfied	42.7%	39.4%	46.1%	42.6%	37.4%
Neutral	17.0%	15.2%	17.6%	18.0%	15.4%
Dissatisfied	5.6%	5.1%	4.9%	6.6%	5.7%
Very Dissatisfied	1.5%	2.0%	1.0%	1.6%	2.0%
(c) Effectiveness of organizational leadership					
Net Answering	n=322	n=99	n=101	n=122	n=246
Very Satisfied	16.8%	12.1%	13.9%	23.0%	20.7%
Satisfied	34.8%	33.3%	40.6%	31.1%	35.0%
Neutral	27.3%	31.3%	27.7%	23.8%	26.8%
Dissatisfied	16.1%	17.2%	15.8%	15.6%	12.6%
Very Dissatisfied	5.0%	6.1%	2.0%	6.6%	4.9%
(d) Job security					
Net Answering	n=322	n=99	n=101	n=122	n=247
Very Satisfied	25.8%	22.2%	21.8%	32.0%	26.3%
Satisfied	39.8%	45.5%	46.5%	29.5%	46.6%
Neutral	25.5%	24.2%	24.8%	27.0%	18.2%
Dissatisfied	5.6%	5.1%	4.0%	7.4%	6.5%
Very Dissatisfied	3.4%	3.0%	3.0%	4.1%	2.4%

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
(e) Level of challenge in work					
Net Answering	n=323	n=99	n=102	n=122	n=247
Very Satisfied	27.6%	22.2%	29.4%	30.3%	27.1%
Satisfied	44.0%	47.5%	41.2%	43.4%	42.9%
Neutral	19.8%	16.2%	24.5%	18.9%	18.6%
Dissatisfied	7.4%	12.1%	3.9%	6.6%	8.5%
Very Dissatisfied	1.2%	2.0%	1.0%	0.8%	2.8%
(f) Personal gratification you feel from doing your job					
Net Answering	n=323	n=99	n=102	n=122	n=247
Very Satisfied	24.5%	16.2%	24.5%	31.1%	31.6%
Satisfied	49.2%	48.5%	52.0%	47.5%	41.3%
Neutral	18.6%	23.2%	16.7%	16.4%	17.8%
Dissatisfied	6.2%	9.1%	4.9%	4.9%	7.3%
Very Dissatisfied	1.5%	3.0%	2.0%	--	2.0%
(g) Quality of service/product provided/produced					
Net Answering	n=322	n=99	n=102	n=122	n=246
Very Satisfied	31.9%	30.3%	30.4%	34.4%	39.4%
Satisfied	52.3%	46.5%	55.9%	54.1%	46.7%
Neutral	13.0%	20.2%	10.8%	9.0%	9.8%
Dissatisfied	2.8%	3.0%	2.9%	2.5%	3.7%
Very Dissatisfied	--	--	--	--	0.4%
(h) Opportunity to be creative					
Net Answering	n=323	n=99	n=102	n=122	n=247
Very Satisfied	29.4%	22.2%	27.5%	36.9%	31.6%
Satisfied	41.8%	37.4%	42.2%	45.1%	38.1%
Neutral	20.1%	28.3%	22.5%	11.5%	15.4%
Dissatisfied	8.0%	12.1%	5.9%	6.6%	10.5%
Very Dissatisfied	0.6%	--	2.0%	--	4.5%
(i) Human diversity (gender, ethnicity)					
Net Answering	n=323	n=99	n=102	n=122	n=242
Very Satisfied	25.1%	20.2%	30.4%	24.6%	26.0%
Satisfied	44.9%	43.4%	42.2%	48.4%	32.6%
Neutral	24.1%	28.3%	23.5%	21.3%	35.5%
Dissatisfied	5.6%	8.1%	2.9%	5.7%	5.4%
Very Dissatisfied	0.3%	--	1.0%	--	0.4%
(j) Relationships with coworkers					
Net Answering	n=323	n=99	n=102	n=122	n=241
Very Satisfied	34.4%	33.3%	32.4%	36.9%	39.0%
Satisfied	48.6%	45.5%	50.0%	50.0%	41.9%

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Neutral	14.6%	15.2%	15.7%	13.1%	15.4%
Dissatisfied	2.5%	6.1%	2.0%	--	3.3%
Very Dissatisfied	--	--	--	--	0.4%
(k) Relationship with immediate supervisor/boss					
Net Answering	n=322	n=99	n=102	n=121	n=238
Very Satisfied	29.8%	29.3%	30.4%	29.8%	38.7%
Satisfied	42.5%	39.4%	45.1%	43.0%	33.2%
Neutral	17.4%	20.2%	16.7%	15.7%	21.0%
Dissatisfied	8.4%	8.1%	6.9%	9.9%	4.6%
Very Dissatisfied	1.9%	3.0%	1.0%	1.7%	2.5%
(l) Fringe benefits					
Net Answering	n=322	n=98	n=102	n=122	n=242
Very Satisfied	18.3%	14.3%	21.6%	18.9%	23.1%
Satisfied	36.0%	35.7%	41.2%	32.0%	37.2%
Neutral	28.0%	35.7%	22.5%	26.2%	24.4%
Dissatisfied	12.1%	10.2%	7.8%	17.2%	8.7%
Very Dissatisfied	5.6%	4.1%	6.9%	5.7%	6.6%
(m) Amount of on-the-job stress					
Net Answering	n=321	n=98	n=102	n=121	n=244
Very Satisfied	16.0%	6.1%	3.9%	10.7%	5.7%
Satisfied	33.2%	31.6%	33.3%	37.2%	38.9%
Neutral	26.6%	31.6%	37.3%	26.4%	32.8%
Dissatisfied	18.0%	24.5%	21.6%	19.8%	18.0%
Very Dissatisfied	6.1%	6.1%	3.9%	5.8%	4.5%
(n) Potential for career/professional advancement					
Net Answering	n=321	n=99	n=102	n=120	n=244
Very Satisfied	11.5%	17.2%	8.8%	9.2%	16.0%
Satisfied	33.3%	36.4%	38.2%	26.7%	33.2%
Neutral	30.8%	28.3%	30.4%	33.3%	26.6%
Dissatisfied	16.8%	12.1%	14.7%	22.5%	18.0%
Very Dissatisfied	7.5%	6.1%	7.8%	8.3%	6.1%
(o) Support for continuing education/in-service programs					
Net Answering	n=323	n=99	n=102	n=122	n=244
Very Satisfied	12.7%	11.1%	11.8%	14.8%	16.4%
Satisfied	26.9%	24.2%	31.4%	25.4%	32.0%
Neutral	30.0%	30.3%	32.4%	27.9%	29.1%
Dissatisfied	22.0%	25.3%	16.7%	23.8%	16.0%
Very Dissatisfied	8.4%	9.1%	7.8%	8.2%	6.6%

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
(p) Salary					
Net Answering	n=321	n=99	n=102	n=120	n=246
Very Satisfied	7.5%	5.1%	5.9%	10.8%	15.0%
Satisfied	41.4%	36.4%	50.0%	38.3%	38.6%
Neutral	28.0%	31.3%	26.5%	26.7%	22.8%
Dissatisfied	18.7%	23.2%	14.7%	18.3%	17.1%
Very Dissatisfied	4.4%	4.0%	2.9%	5.8%	6.5%
(q) Accessibility/proximity of childcare services					
Net Answering	n=316	n=98	n=102	n=116	n=235
Very Satisfied	7.0%	6.1%	4.9%	9.5%	5.5%
Satisfied	9.8%	6.1%	14.7%	8.6%	10.6%
Neutral	68.4%	78.6%	60.8%	66.4%	71.9%
Dissatisfied	7.3%	3.1%	10.8%	7.8%	8.1%
Very Dissatisfied	7.6%	6.1%	8.8%	7.8%	3.8%
(r) Proximity of work to your home					
Net Answering	n=319	n=98	n=102	n=119	n=245
Very Satisfied	32.3%	32.7%	28.4%	35.3%	36.3%
Satisfied	28.5%	29.6%	28.4%	27.7%	30.2%
Neutral	22.6%	23.5%	24.5%	20.2%	17.6%
Dissatisfied	11.6%	11.2%	10.8%	12.6%	10.2%
Very Dissatisfied	5.0%	3.1%	7.8%	4.2%	5.7%
(s) Work environment or work culture					
Net Answering	n=322	n=98	n=102	n=122	n=243
Very Satisfied	18.9%	15.3%	20.6%	20.5%	32.1%
Satisfied	46.0%	48.0%	43.1%	46.7%	43.6%
Neutral	22.7%	19.4%	27.5%	21.3%	15.6%
Dissatisfied	12.1%	17.3%	7.8%	11.5%	6.2%
Very Dissatisfied	0.3%	--	1.0%	--	2.5%
(t) Respect by upper management					
Net Answering	n=322	n=99	n=102	n=121	n=241
Very Satisfied	28.6%	28.3%	26.5%	30.6%	29.0%
Satisfied	36.3%	40.4%	39.2%	30.6%	36.9%
Neutral	20.5%	16.2%	22.5%	22.3%	22.8%
Dissatisfied	10.9%	12.1%	10.8%	9.9%	7.5%
Very Dissatisfied	3.7%	3.0%	1.0%	6.6%	3.7%
(u) Flexibility to do your work when and how you like					
Net Answering	n=320	n=99	n=102	n=119	n=247
Very Satisfied	34.1%	30.3%	30.4%	40.3%	36.4%
Satisfied	45.0%	45.5%	48.0%	42.0%	34.8%

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Neutral	12.8%	14.1%	13.7%	10.9%	19.0%
Dissatisfied	7.5%	9.1%	6.9%	6.7%	8.5%
Very Dissatisfied	0.6%	1.0%	1.0%	--	1.2%
(v) Ability to balance work and the rest of your life					
Net Answering	n=321	n=98	n=102	n=121	n=246
Very Satisfied	24.3%	19.4%	24.5%	28.1%	26.4%
Satisfied	40.2%	37.8%	34.3%	47.1%	42.3%
Neutral	22.4%	27.6%	25.5%	15.7%	19.1%
Dissatisfied	11.5%	13.3%	14.7%	7.4%	11.8%
Very Dissatisfied	1.6%	2.0%	1.0%	1.7%	0.4%
(w) Level of technology employed at the company					
Net Answering	n=318	n=98	n=100	n=120	n=244
Very Satisfied	26.1%	21.4%	25.0%	30.8%	27.0%
Satisfied	49.1%	52.0%	47.0%	48.3%	47.1%
Neutral	16.7%	19.4%	17.0%	14.2%	15.2%
Dissatisfied	7.2%	6.1%	9.0%	6.7%	8.2%
Very Dissatisfied	0.9%	1.0%	2.0%	--	2.5%
Q28: Think about the extent to which your employer made implicit or explicit promises during recruitment to provide you with certain things in exchange for your contributions to the organization. Would you say that you have NOT received everything promised to you by your employer in exchange for your contributions?					
Net Answering	n=317	n=97	n=99	n=121	n=240
Strongly Agree	6.3%	6.2%	6.1%	6.6%	4.6%
Agree	16.4%	21.6%	12.1%	15.7%	16.7%
Neutral	31.5%	28.9%	33.3%	32.2%	30.4%
Disagree	32.8%	37.1%	32.3%	29.8%	34.2%
Strongly Disagree	12.9%	6.2%	16.2%	15.7%	14.2%
Q29: How likely is it that you will actively look for a new job in the next year?					
Net Answering	n=320	n=97	n=102	n=121	n=248
Highly Likely	19.1%	23.7%	15.7%	18.2%	15.3%
Likely	17.2%	26.8%	16.7%	9.9%	14.5%
Unsure	20.6%	20.6%	22.5%	19.0%	24.2%
Unlikely	17.8%	18.6%	22.5%	13.2%	24.6%
Highly Unlikely	25.3%	10.3%	22.5%	39.7%	21.4%
Q30: As you plan the next steps in your career, will you:					
Net Answering	n=325	n=99	n=102	n=123	n=252
Look for a different job within the same company.	12.0%	15.2%	13.7%	8.1%	6.7%
Look for a different job within a different company in a similar industry	14.2%	15.2%	10.8%	15.4%	15.9%
Look for a different job within a different company in a different industry	8.6%	9.1%	9.8%	7.3%	9.5%

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Look for a similar job within a different company in a similar industry	13.8%	16.2%	11.8%	13.8%	18.7%
Look for a similar job within a different company in a different industry	4.3%	8.1%	2.0%	3.3%	4.4%
Return to school to pursue another degree	3.7%	5.1%	3.9%	2.4%	4.4%
Unsure	14.2%	20.2%	18.6%	5.7%	15.5%
I do not plan on switching jobs.	29.2%	11.1%	29.4%	43.9%	25.0%
Q31: if you plan to look for a job within a different industry, please tell us what industry or industries you are considering:**					
Net Answering	n=62	n=24	n=20	n=18	n=49
Different company	3.2%	--	10.0%	--	2.0%
Any other industry than current	1.6%	--	5.0%	--	10.2%
Architecture	--	--	--	--	2.0%
Marketing	14.5%	33.3%	5.0%	--	--
Printing	6.5%	--	10.0%	11.1%	2.0%
Design (graphic, unspecified, etc.)	--	--	--	--	10.2%
Education/Teaching	4.8%	8.3%	--	5.6%	4.1%
Government/Non-Profit	3.2%	8.3%	--	--	10.2%
Unsure	4.8%	--	5.0%	11.1%	8.2%
N/A	6.5%	8.3%	5.0%	5.6%	4.1%
More creative work	--	--	--	--	6.1%
Start own company	4.8%	--	10.0%	5.6%	6.1%
Miscellaneous/Other	6.5%	--	15.0%	5.6%	6.1%
Interior Design	--	--	--	--	2.0%
Industrial Design	--	--	--	--	4.1%
IT/Software	3.2%	--	5.0%	5.6%	2.0%
Instructional Design	--	--	--	--	2.0%
Advertising/PR	4.8%	4.2%	--	11.1%	2.0%
Consumer Goods	--	--	--	--	2.0%
Human Resources	--	--	--	--	2.0%
Fine Arts & Film	--	--	--	--	4.1%
Environmental/Sustainability	3.2%	--	10.0%	--	6.1%
Growing industry that is innovative	1.6%	4.2%	--	--	--
Manufacturing	1.6%	4.2%	--	--	--
Sales (any industry)	1.6%	--	5.0%	--	--
Automobile	3.2%	--	--	11.1%	--
Event Planning	1.6%	--	5.0%	--	--
Financial	1.6%	4.2%	--	--	--
Health Care	4.8%	4.2%	--	11.1%	--

**Answers have been coded.

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Entertainment/Media	3.2%	4.2%	--	5.6%	--
Return to school to study other field	1.6%	4.2%	--	--	--
Consulting	3.2%	--	5.0%	5.6%	--
Color Science	--	--	--	--	--
Law	--	--	--	--	--
Publishing	4.8%	8.3%	--	5.6%	--
Packaging	3.2%	4.2%	5.0%	--	2.0%
Q32: If you plan to look for a job at a different company, is there anything your current company could have done/could do to keep you there?***					
Net Answering	n=120	n=46	n=37	n=37	n=108
No, there is/was nothing they can do/could have done.	15.8%	13.0%	21.6%	13.5%	19.4%
Company closed/department dissolved/laid off	0.8%	--	--	2.7%	--
Increased schedule flexibility	0.8%	2.2%	--	--	6.5%
No, personal circumstances caused me to leave.	--	--	--	--	2.8%
Changed policies (i.e., pregnancy leave)	--	--	--	--	--
Increased support/resources	1.7%	--	2.7%	2.7%	1.9%
Increased job responsibilities/challenge of work	2.5%	2.2%	2.7%	2.7%	6.5%
Promotion/Raise/Increase Salary	24.2%	23.9%	24.3%	24.3%	24.1%
No, I retired.	--	--	--	--	--
Increased respect (from leadership/boss)	5.0%	4.3%	2.7%	8.1%	1.9%
Yes - unspecified.	--	--	--	--	0.9%
Better human resources department	--	--	--	--	--
Yes, if they did not eliminate my position	--	--	--	--	--
Change in business strategy/vision/goals	2.5%	--	8.1%	--	0.9%
More clearly defined career path	2.5%	2.2%	5.4%	--	2.8%
Increased openness to new ideas	0.8%	--	--	2.7%	0.9%
Other/Miscellaneous	1.7%	2.2%	2.7%	--	4.6%
Increased benefits	3.3%	4.3%	2.7%	2.7%	1.9%
Better leadership/management	5.8%	4.3%	2.7%	10.8%	5.6%
Different location	5.0%	4.3%	8.1%	2.7%	3.7%
Increased education/training	1.7%	2.2%	2.7%	--	--
Increased opportunities for growth	5.8%	8.7%	2.7%	5.4%	5.6%
N/A or Unsure	5.0%	4.3%	5.4%	5.4%	3.7%
Different boss	--	--	--	--	0.9%
Kept promises made (during recruitment, etc.)	2.5%	2.2%	--	5.4%	1.9%
Improve corporate culture/work environment (less stress, etc.)	5.0%	8.7%	--	5.4%	2.8%
Increased pay equity	2.5%	2.2%	2.7%	2.7%	0.9%

***Answers have been coded.

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Structure/Organizational changes	1.7%	2.2%	2.7%	--	--
More full-time positions available	2.5%	4.3%	--	2.7%	--
Less work	0.8%	2.2%	--	--	--
END OF CURRENTLY EMPLOYED QUESTIONS -- START OF UNEMPLOYED/OTHER STATUS QUESTIONS					
Q33: Were you previously employed (before changing to your current status)?*					
Net Answering	n=21	n=9	n=8	n=4	n=19
Yes	81.0%	66.7%	87.5%	100.0%	94.7%
No	19.0%	33.3%	12.5%	--	5.3%
Q34: What was your most recent job title?*					
Net Answering	n=44	n=7	n=7	n=30	n=13
Art Director/Creative Director	2.3%	--	14.3%	--	30.8%
Graphic Designer	2.3%	14.3%	--	--	30.8%
Senior Graphic Designer	--	--	--	--	7.7%
President/Owner	4.5%	--	--	6.7%	7.7%
Vice President/Department Head	18.2%	--	14.3%	23.3%	7.7%
Designer - Other (Industrial, Interior, etc.)	--	--	--	--	7.7%
Director/Manager - Other (Multimedia, etc.)	2.3%	--	--	3.3%	--
Account Manager/Executive	9.1%	14.3%	14.3%	6.7%	--
Miscellaneous/Other	6.8%	14.3%	--	6.7%	--
Instructor/Educator/Teacher	2.3%	--	--	3.3%	--
Professor	2.3%	--	--	3.3%	--
Quality Assurance/Process Engineer	4.5%	--	--	6.7%	--
Operations/Production Management	9.1%	--	14.3%	10.0%	--
Manager - Other/Miscellaneous	4.5%	--	14.3%	3.3%	--
Sales Representative/Associate	2.3%	--	--	3.3%	--
Systems Engineer/Consultant	2.3%	--	14.3%	--	--
Research & Development	4.5%	14.3%	--	3.3%	--
Project Manager/Coordinator	4.5%	--	14.3%	3.3%	--
Marketing Communications Specialist	2.3%	--	--	3.3%	--
Chief Officer/Corporate Director	2.3%	--	--	3.3%	--
Customer Service Representative	2.3%	--	--	3.3%	7.7%
Press Operator/Maintenance	11.4%	42.9%	--	6.7%	--
Q35: Type of firm where you were last employed:					
Net Answering	n=42	n=7	n=7	n=28	n=13
Commercial printing	28.6%	14.3%	--	39.3%	7.7%
Publishing	4.8%	--	--	7.1%	7.7%

*Please note that those responding that they were retired in the original work status question skipped this question in the survey. This resulted in the differences between the number who were previously employed and the number who answered the following questions (in classifications where there were retired individuals completing the survey).

**Answers have been coded.

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Advertising	4.8%	28.6%	--	--	30.8%
Design firm	--	--	--	--	15.4%
In-house corporate communications department or print shop	9.5%	28.6%	28.6%	--	15.4%
Other (please specify)	52.4%	28.6%	71.4%	53.6%	23.1%
(a) Coded Other Firm Responses					
Net Answering	n=22	n=2	n=5	n=15	n=3
Direct Marketing/Mail	4.5%	--	--	6.7%	--
Education	18.2%	50.0%	--	20.0%	--
Paper & Printing Supplies	9.1%	--	--	13.3%	--
Software & IT	9.1%	--	20.0%	6.7%	--
Financial Printing	9.1%	--	--	13.3%	--
Package & Label Printing	9.1%	--	40.0%	--	--
Miscellaneous/Non-printing	4.5%	--	--	6.7%	33.3%
Printing Equipment Manufacturer	18.2%	--	40.0%	13.3%	--
Manufacturing (General, Non-printing)	4.5%	--	--	6.7%	--
Retail	4.5%	50.0%	--	--	33.3%
Book Manufacturing	4.5%	--	--	6.7%	--
Digital Media Production	--	--	--	--	33.3%
Printing Industry Trade Association	4.5%	--	--	6.7%	--
Q36: Number of employees in the company:					
Net Answering	n=43	n=7	n=7	n=29	n=13
1-5 employees	2.3%	14.3%	--	--	23.1%
6-10 employees	2.3%	--	--	3.4%	--
11-19 employees	9.3%	28.6%	--	6.9%	7.7%
20-49 employees	9.3%	--	14.3%	10.3%	7.7%
50-99 employees	2.3%	--	42.9%	3.4%	38.5%
100-499 employees	32.6%	42.9%	42.9%	27.6%	--
500+ employees	41.9%	14.3%	--	48.3%	23.1%
Q37: How many years has the company been in business?					
Net Answering	n=43	n=7	n=7	n=29	n=13
1-5 years	4.7%	--	14.3%	3.4%	23.1%
6-10 years	9.3%	28.6%	14.3%	3.4%	--
11-19 years	4.7%	--	14.3%	3.4%	15.4%
20-49 years	46.5%	57.1%	14.3%	51.7%	38.5%
50-99 years	18.6%	--	14.3%	24.1%	23.1%
100-149 years	11.6%	14.3%	14.3%	10.3%	--
150+ years	4.7%	--	14.3%	3.4%	--

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Q38: Amount of time in this position?					
Net Answering	n=43	n=7	n=7	n=29	n=13
0-6 months	--	--	--	--	23.1%
7-12 months	11.6%	57.1%	14.3%	--	7.7%
>1 year - 18 months	9.3%	--	14.3%	10.3%	7.7%
>18 months - 2 years	4.7%	14.3%	14.3%	--	15.4%
>2 - 3 years	11.6%	14.3%	14.3%	10.3%	--
>3 - 4 years	11.6%	14.3%	14.3%	10.3%	7.7%
>4 - 5 years	7.0%	--	14.3%	6.9%	15.4%
>5 - 6 years	4.7%	--	14.3%	3.4%	7.7%
>6 -7 years	4.7%	--	--	6.9%	7.7%
>8 - 9 years	--	--	--	--	--
>9 - 10 years	4.7%	--	--	6.9%	--
>10 years and up	30.2%	--	--	44.8%	7.7%
Q39: Number of employers you worked for prior to the job being described?					
Net Answering	n=43	n=7	n=7	n=29	n=12
0 employers	7.0%	14.3%	--	6.9%	8.3%
1 employer	23.3%	42.9%	42.9%	13.8%	41.7%
2 employers	20.9%	42.9%	28.6%	13.8%	8.3%
3 employers	9.3%	--	28.6%	6.9%	33.3%
4-5 employers	16.3%	--	--	24.1%	8.3%
6+ employers	23.3%	--	--	34.5%	--
Q40: Did you work at the same position during your entire time with your most recent employer?					
Net Answering	n=42	n=7	n=7	n=28	n=13
Yes	76.2%	100.0%	85.7%	67.9%	61.5%
No	23.8%	--	14.3%	32.1%	38.5%
Q41: If no, please provide details:**					
Net Answering	n=10	n=0	n=1	n=9	n=6
Began as intern/part-time/contract, moved to full-time/contract	--	--	--	--	--
Multiple level promotion	50.0%	--	--	55.6%	33.3%
Single level promotion	10.0%	--	--	11.1%	50.0%
Moved to different department(s) internally	40.0%	--	100.0%	33.3%	--
Responsibilities increased	--	--	--	--	16.7%
Q42: What was your annual income from this job?					
Net Answering	n=40	n=7	n=7	n=26	n=12
\$14,999 or less	2.5%	14.3%	--	--	8.3%
\$15,000 - \$19,999	2.5%	--	--	3.8%	--
\$20,000 - \$29,999	7.5%	28.6%	--	3.8%	8.3%

**Answers have been coded.

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
\$30,000 - \$39,999	7.5%	42.9%	--	--	25.0%
\$40,000 - \$49,999	10.0%	14.3%	14.3%	7.7%	25.0%
\$50,000 - \$59,999	10.0%	--	14.3%	11.5%	25.0%
\$60,000 - \$69,999	10.0%	--	--	15.4%	--
\$70,000 - \$79,999	7.5%	--	--	11.5%	--
\$80,000 - \$89,999	10.0%	--	28.6%	7.7%	--
\$90,000 - \$99,999	2.5%	--	--	3.8%	--
\$100,000 or more	30.0%	--	42.9%	34.6%	8.3%
Q43: Did you hold any other jobs during your employment?					
Net Answering	n=42	n=7	n=7	n=28	n=13
Yes	9.5%	--	14.3%	10.7%	30.8%
No	90.5%	100.0%	85.7%	89.3%	69.2%
Q44: If yes, how many other jobs/what types of jobs did you hold?					
Net Answering	n=5	n=0	n=1	n=4	n=4
One other full-time job	60.0%	--	100.0%	50.0%	25.0%
One other part-time job	20.0%	--	--	25.0%	50.0%
Two other part-time jobs	20.0%	--	--	25.0%	25.0%
Three or more other part-time jobs	--	--	--	--	--
Q45: How closely related was your job to your most recent degree attained?					
Net Answering	n=41	n=7	n=7	n=27	n=13
Highly Related	48.8%	57.1%	42.9%	48.1%	61.5%
Moderately Related	39.0%	28.6%	42.9%	40.7%	15.4%
Slightly Related	9.8%	--	14.3%	11.1%	23.1%
Not at All Related	2.4%	14.3%	--	--	--
Q46: How well did your experiences in school prepare you for this job?					
Net Answering	n=41	n=7	n=7	n=27	n=13
Exceptionally Well	26.8%	28.6%	14.3%	29.6%	15.4%
More than Adequately	41.5%	42.9%	85.7%	29.6%	38.5%
Adequately	29.3%	28.6%	--	37.0%	38.5%
Less than Adequately	2.4%	--	--	3.7%	7.7%
Poorly	--	--	--	--	--
Not At All	--	--	--	--	--
Q47: At the time of employment, did you believe that you had the education and training necessary to get ahead in your job or career?					
Net Answering	n=41	n=7	n=7	n=27	n=13
I had more than enough.	43.9%	42.9%	42.9%	44.4%	30.8%
I had what was needed.	41.5%	57.1%	42.9%	37.0%	61.5%
I needed more.	14.6%	--	14.3%	18.5%	7.7%
Don't know/Unsure	--	--	--	--	--

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Q48: What were the top 5 things you learned in your college experience that have been valuable for your work/career?†					
Total Distinct Answers	n=149	n=26	n=31	n=92	n=41
Business Skills (Marketing, Finance, etc.)	3.4%	--	3.2%	4.3%	2.4%
Creative Thinking & Learning Skills	2.0%	--	3.2%	2.2%	2.4%
Printing Technologies/Processes/Production	18.1%	23.1%	29.0%	13.0%	2.4%
Software & Computer Skills	3.4%	11.5%	6.5%	--	14.6%
Time Management & Organizational Skills	6.0%	7.7%	9.7%	4.3%	4.9%
Color (Color Theory, Color Management)	2.0%	3.8%	3.2%	1.1%	--
Industry Knowledge & Trends	4.0%	3.8%	3.2%	4.3%	--
Communication & Writing Skills	4.0%	3.8%	3.2%	4.3%	4.9%
Human Resources/Management Skills	3.4%	--	--	5.4%	--
Typography & Typesetting	--	--	--	--	4.9%
Estimating, Scheduling, & Budgeting	1.3%	--	--	2.2%	--
Networking & People Skills (i.e., how to work in teams)	10.7%	11.5%	9.7%	10.9%	14.6%
Professional Skills & Personal Development	6.7%	--	--	10.9%	9.8%
Project Management	0.7%	3.8%	--	--	--
Sales/Selling	0.7%	--	--	1.1%	--
Bindery Technologies/Processes (Finishing)	0.7%	--	3.2%	--	--
Statistics & Quality Control	2.7%	--	3.2%	3.3%	--
Miscellaneous/Other	4.0%	3.8%	3.2%	4.3%	7.3%
Web Design/Programming	0.7%	--	--	1.1%	--
Presentation Skills	0.7%	--	--	1.1%	--
Co-op/Internship Experience & On-Campus Jobs	3.4%	7.7%	6.5%	1.1%	--
Portfolio Creation/Preparation, Resume Creation, Interviewing Skills	--	--	--	--	4.9%
Critical Thinking & Problem Solving	3.4%	3.8%	--	4.3%	2.4%
Technical Skills	2.7%	--	3.2%	3.3%	--
Professors/Learning Process	4.0%	3.8%	3.2%	4.3%	--
Job Exploration & Career Planning	0.7%	--	--	1.1%	--
Research Skills	2.7%	--	--	4.3%	2.4%
Paper & Other Substrates	0.7%	--	--	1.1%	--
File Manipulation/Prepress or Preflighting	1.3%	--	3.2%	1.1%	2.4%
Leadership Skills	1.3%	7.7%	--	--	2.4%
Specific RIT Class	0.7%	3.8%	--	--	--

† Answers have been coded. For SPM, there were 37 respondents who filled in at least one answer. For 20-29 year olds, there were 7 respondents who filled in at least one answer. For 30-44 year olds, there were 7 respondents who filled in at least one answer. For 45+ year olds, there were 23 respondents who filled in at least one answer. For SD, there were 11 respondents who filled in at least one answer. "Total Distinct Answers" is the sum of all responses given that were able to be coded.

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
RIT Reputation	2.0%	--	--	3.3%	--
Ability to Accept/Use Criticism/Feedback	--	--	--	--	4.9%
Design Skills/Techniques (Layout)	1.3%	--	3.2%	1.1%	9.8%
Attention to Detail/Craftsmanship (Quality of Work)	0.7%	--	--	1.1%	--
Drawing/Drafting Skills	--	--	--	--	2.4%
Q49: Identify 5 things you WISHED you learned during your college experience that you believe would have been valuable for your career/advancement:‡					
Total Distinct Answers	n=104	n=17	n=25	n=62	n=35
Broader Career Exploration/Career Planning	1.9%	5.9%	4.0%	--	--
Human Resource Management, Teamwork, Personnel Issues	5.8%	11.8%	4.0%	4.8%	--
Industry History, Knowledge, Trends	1.9%	5.9%	--	1.6%	--
Business Skills (Marketing, Accounting, Management, Etc.)	24.0%	17.6%	16.0%	29.0%	2.9%
Packaging Science & Design	1.9%	--	8.0%	--	--
Electronic Prepress & Software Skills	1.0%	--	4.0%	--	5.7%
Selling/Sales Training	2.9%	--	4.0%	3.2%	--
Web Design, Programming, & Development	1.9%	5.9%	4.0%	--	5.7%
VDP & Digital Technologies	1.9%	11.8%	--	--	--
Materials/Substrates	2.9%	5.9%	8.0%	--	--
Writing/Typing	--	--	--	--	--
Computers, IT, Networking, MIS	2.9%	5.9%	--	3.2%	11.4%
Statistics & Quality Control	1.9%	5.9%	--	1.6%	--
Project Management	1.0%	--	4.0%	--	--
Workflows & Workflow Analysis	1.0%	--	4.0%	--	--
Miscellaneous/Other	4.8%	--	--	8.1%	--
Broader Range of Classes/Different Approach to Learning	3.8%	--	8.0%	3.2%	5.7%
Multimedia Skills (Video, Photo, Etc.)	1.9%	--	8.0%	--	2.9%
Networking Skills	1.9%	--	4.0%	1.6%	2.9%
Other Specific Topic (ISO, Bar Codes, etc.)	3.8%	--	--	6.5%	5.7%
Print Processes/Technologies/Production	3.8%	17.6%	--	1.6%	14.3%
Co-op/Internship/Work Experience	1.0%	--	--	1.6%	8.6%
Time Management & Organizational Skills	--	--	--	--	2.9%
Professional/Workplace Skills (Communication, etc.)	9.6%	--	8.0%	12.9%	5.7%

‡ Answers have been coded. For SPM, there were 31 respondents who filled in at least one answer. For 20-29 year olds, there were 4 respondents who filled in at least one answer. For 30-44 year olds, there were 7 respondents who filled in at least one answer. For 45+ year olds, there were 20 respondents who filled in at least one answer. For SD, there were 11 respondents who filled in at least one answer. "Total Distinct Answers" is the sum of all responses given that were able to be coded.

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Realistic Expectations (Salary, Jobs, Etc.)	3.8%	--	--	6.5%	2.9%
Technology/Changes in Technology	1.0%	--	--	1.6%	2.9%
Presentation Skills & Public Speaking	1.9%	--	--	3.2%	--
Legal & Copyright Issues	1.9%	--	4.0%	1.6%	2.9%
Retirement Planning	1.9%	--	--	3.2%	--
Job Search & Interviewing Skills	1.9%	--	4.0%	1.6%	8.6%
Book Design/Manufacturing/Publishing	--	--	--	--	--
Color (Color Theory, Color Management)	1.9%	5.9%	4.0%	--	2.9%
Negotiating Skills	1.9%	--	--	3.2%	2.9%
Typography	--	--	--	--	2.9%
Q50: Overall, would you say that you were satisfied with your most recent job?					
Net Answering	n=37	n=6	n=7	n=24	n=12
Completely satisfied	27.0%	--	28.6%	33.3%	25.0%
Mostly satisfied	43.2%	50.0%	28.6%	45.8%	33.3%
Somewhat satisfied	16.2%	33.3%	--	16.7%	16.7%
Unsure	5.4%	--	28.6%	--	16.7%
Somewhat dissatisfied	5.4%	16.7%	--	4.2%	8.3%
Mostly dissatisfied	2.7%	--	14.3%	--	--
Completely dissatisfied	--	--	--	--	--
Q51: Please rate your level of satisfaction with aspects of your most recent job:					
(a) Organization's ethical standards					
Net Answering	n=37	n=6	n=7	n=24	n=12
Very Satisfied	27.0%	16.7%	--	37.5%	25.0%
Satisfied	37.8%	50.0%	42.9%	33.3%	25.0%
Neutral	13.5%	16.7%	28.6%	8.3%	33.3%
Dissatisfied	13.5%	16.7%	--	16.7%	8.3%
Very Dissatisfied	8.1%	--	28.6%	4.2%	8.3%
(b) Organization's goal/mission/vision					
Net Answering	n=37	n=6	n=7	n=24	n=12
Very Satisfied	18.9%	16.7%	--	25.0%	16.7%
Satisfied	48.6%	66.7%	71.4%	37.5%	50.0%
Neutral	18.9%	16.7%	14.3%	10.8%	8.3%
Dissatisfied	10.8%	--	--	16.7%	25.0%
Very Dissatisfied	2.7%	--	14.3%	--	--
(c) Effectiveness of organizational leadership					
Net Answering	n=37	n=6	n=7	n=24	n=12
Very Satisfied	13.5%	16.7%	--	16.7%	16.7%
Satisfied	35.1%	33.3%	14.3%	41.7%	33.3%

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Neutral	24.3%	33.3%	42.9%	16.7%	50.0%
Dissatisfied	10.8%	16.7%	14.3%	12.5%	--
Very Dissatisfied	16.2%	--	28.6%	12.5%	--
(d) Job security					
Net Answering	n=36	n=6	n=7	n=23	n=12
Very Satisfied	25.0%	16.7%	14.3%	30.4%	16.7%
Satisfied	36.1%	66.7%	14.3%	34.8%	16.7%
Neutral	16.7%	16.7%	14.3%	17.4%	25.0%
Dissatisfied	13.9%	--	28.6%	13.0%	16.7%
Very Dissatisfied	8.3%	--	28.6%	4.3%	25.0%
(e) Level of challenge in work					
Net Answering	n=37	n=6	n=7	n=24	n=12
Very Satisfied	32.4%	--	14.3%	45.8%	25.0%
Satisfied	45.9%	50.0%	57.1%	41.7%	33.3%
Neutral	10.8%	33.3%	14.3%	4.2%	25.0%
Dissatisfied	5.4%	16.7%	--	4.2%	16.7%
Very Dissatisfied	5.4%	--	14.3%	4.2%	--
(f) Personal gratification you feel from doing your job					
Net Answering	n=37	n=6	n=7	n=24	n=12
Very Satisfied	37.8%	16.7%	14.3%	50.0%	41.7%
Satisfied	35.1%	33.3%	28.6%	37.5%	16.7%
Neutral	8.1%	16.7%	14.3%	4.2%	25.0%
Dissatisfied	10.8%	16.7%	14.3%	8.3%	16.7%
Very Dissatisfied	8.1%	16.7%	28.6%	--	--
(g) Quality of service/product provided/produced					
Net Answering	n=37	n=6	n=7	n=24	n=12
Very Satisfied	40.5%	16.7%	28.6%	50.0%	25.0%
Satisfied	35.1%	33.3%	28.6%	37.5%	58.3%
Neutral	16.2%	33.3%	28.6%	8.3%	8.3%
Dissatisfied	8.1%	16.7%	14.3%	4.2%	8.3%
Very Dissatisfied	--	--	--	--	--
(h) Opportunity to be creative					
Net Answering	n=36	n=6	n=7	n=23	n=12
Very Satisfied	27.8%	--	28.6%	34.8%	25.0%
Satisfied	38.9%	50.0%	28.6%	39.1%	33.3%
Neutral	16.7%	16.7%	28.6%	13.0%	33.3%
Dissatisfied	13.9%	16.7%	14.3%	13.0%	8.3%
Very Dissatisfied	2.8%	16.7%	--	--	--

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
(i) Human diversity (gender, ethnicity)					
Net Answering	n=37	n=6	n=7	n=24	n=11
Very Satisfied	35.1%	50.0%	28.6%	33.3%	36.4%
Satisfied	45.9%	33.3%	42.9%	50.0%	27.3%
Neutral	10.8%	16.7%	--	12.5%	36.4%
Dissatisfied	5.4%	--	14.3%	4.2%	--
Very Dissatisfied	2.7%	--	14.3%	--	--
(j) Relationships with coworkers					
Net Answering	n=37	n=6	n=7	n=24	n=12
Very Satisfied	37.8%	50.0%	14.3%	41.7%	33.3%
Satisfied	45.9%	33.3%	57.1%	45.8%	41.7%
Neutral	8.1%	16.7%	--	8.3%	16.7%
Dissatisfied	8.1%	--	28.6%	4.2%	--
Very Dissatisfied	--	--	--	--	8.3%
(k) Relationship with immediate supervisor/boss					
Net Answering	n=37	n=6	n=7	n=24	n=12
Very Satisfied	27.0%	33.3%	14.3%	29.2%	8.3%
Satisfied	37.8%	50.0%	14.3%	41.7%	50.0%
Neutral	16.2%	16.7%	14.3%	16.7%	33.3%
Dissatisfied	10.8%	--	28.6%	8.3%	--
Very Dissatisfied	8.1%	--	28.6%	4.2%	8.3%
(l) Fringe benefits					
Net Answering	n=37	n=6	n=7	n=24	n=12
Very Satisfied	21.6%	--	28.6%	25.0%	16.7%
Satisfied	35.1%	50.0%	28.6%	33.3%	41.7%
Neutral	24.3%	33.3%	28.6%	20.8%	16.7%
Dissatisfied	16.2%	16.7%	--	20.8%	25.0%
Very Dissatisfied	2.7%	--	14.3%	--	--
(m) Amount of on-the-job stress					
Net Answering	n=36	n=6	n=7	n=23	n=12
Very Satisfied	11.1%	16.7%	--	13.0%	8.3%
Satisfied	33.3%	50.0%	14.3%	34.8%	16.7%
Neutral	27.8%	16.7%	57.1%	21.7%	50.0%
Dissatisfied	16.7%	16.7%	14.3%	17.4%	16.7%
Very Dissatisfied	11.1%	--	14.3%	13.0%	8.3%
(n) Potential for career/professional advancement					
Net Answering	n=37	n=6	n=7	n=24	n=12
Very Satisfied	8.1%	16.7%	14.3%	4.2%	--
Satisfied	29.7%	33.3%	14.3%	33.3%	16.7%

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Neutral	35.1%	16.7%	42.9%	37.5%	58.3%
Dissatisfied	18.9%	--	28.6%	20.8%	25.0%
Very Dissatisfied	8.1%	33.3%	--	4.2%	--
(o) Support for continuing education/in-service programs					
Net Answering	n=37	n=6	n=7	n=24	n=12
Very Satisfied	18.9%	--	14.3%	25.0%	--
Satisfied	29.7%	33.3%	14.3%	33.3%	33.3%
Neutral	21.6%	33.3%	28.6%	16.7%	33.3%
Dissatisfied	13.5%	--	14.3%	16.7%	25.0%
Very Dissatisfied	16.2%	33.3%	28.6%	8.3%	8.3%
(p) Salary					
Net Answering	n=37	n=6	n=7	n=24	n=12
Very Satisfied	16.2%	--	42.9%	12.5%	--
Satisfied	40.5%	--	28.6%	54.2%	33.3%
Neutral	27.0%	50.0%	28.6%	20.8%	41.7%
Dissatisfied	16.2%	50.0%	--	12.5%	25.0%
Very Dissatisfied	--	--	--	--	--
(q) Accessibility/proximity of childcare services					
Net Answering	n=34	n=5	n=6	n=23	n=12
Very Satisfied	2.9%	--	--	4.3%	--
Satisfied	8.8%	--	--	13.0%	--
Neutral	73.5%	100.0%	83.3%	65.2%	83.3%
Dissatisfied	5.9%	--	--	8.7%	16.7%
Very Dissatisfied	8.8%	--	16.7%	8.7%	--
(r) Proximity of work to your home					
Net Answering	n=36	n=6	n=7	n=23	n=12
Very Satisfied	25.0%	16.7%	28.6%	26.1%	41.7%
Satisfied	41.7%	33.3%	28.6%	47.8%	16.7%
Neutral	25.0%	33.3%	28.6%	21.7%	25.0%
Dissatisfied	8.3%	16.7%	14.3%	4.3%	16.7%
Very Dissatisfied	--	--	--	--	--
(s) Work environment or work culture					
Net Answering	n=37	n=6	n=7	n=24	n=12
Very Satisfied	18.9%	16.7%	14.3%	20.8%	8.3%
Satisfied	43.2%	50.0%	28.6%	45.8%	66.7%
Neutral	18.9%	33.3%	42.9%	8.3%	16.7%
Dissatisfied	13.5%	--	14.3%	16.7%	8.3%
Very Dissatisfied	5.4%	--	--	8.3%	--

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
(t) Respect by upper management					
Net Answering	n=37	n=6	n=7	n=24	n=12
Very Satisfied	18.9%	16.7%	14.3%	20.8%	16.7%
Satisfied	48.6%	50.0%	42.9%	50.0%	25.0%
Neutral	10.5%	16.7%	28.6%	4.2%	41.7%
Dissatisfied	10.8%	16.7%	14.3%	8.3%	8.3%
Very Dissatisfied	10.8%	--	--	16.7%	8.3%
(u) Flexibility to do your work when and how you like					
Net Answering	n=37	n=6	n=7	n=24	n=12
Very Satisfied	32.4%	33.3%	28.6%	33.3%	33.3%
Satisfied	37.8%	16.7%	42.9%	41.7%	25.0%
Neutral	16.2%	16.7%	14.3%	16.7%	33.3%
Dissatisfied	10.8%	33.3%	--	8.3%	8.3%
Very Dissatisfied	2.7%	--	14.3%	--	--
(v) Ability to balance work and the rest of your life					
Net Answering	n=37	n=6	n=7	n=24	n=12
Very Satisfied	21.6%	16.7%	--	29.2%	16.7%
Satisfied	40.5%	33.3%	57.1%	37.5%	50.0%
Neutral	18.9%	33.3%	28.6%	12.5%	16.7%
Dissatisfied	13.5%	16.7%	--	16.7%	8.3%
Very Dissatisfied	5.4%	--	14.3%	4.2%	8.3%
(w) Level of technology employed at the company					
Net Answering	n=36	n=6	n=6	n=24	n=12
Very Satisfied	30.6%	16.7%	33.3%	33.3%	33.3%
Satisfied	50.0%	33.3%	50.0%	54.2%	41.7%
Neutral	8.3%	33.3%	--	4.2%	16.7%
Dissatisfied	11.1%	16.7%	16.7%	8.3%	8.3%
Very Dissatisfied	--	--	--	--	--
Q52: Think about the extent to which your employer made implicit or explicit promises during recruitment to provide you with certain things in exchange for your contributions to the organization. Would you say that you did NOT receive everything promised to you by your most recent employer in exchange for your contributions?					
Net Answering	n=36	n=6	n=7	n=23	n=12
Strongly Agree	11.1%	--	14.3%	13.0%	--
Agree	16.7%	16.7%	28.6%	13.0%	--
Neutral	25.0%	16.7%	28.6%	26.1%	66.7%
Disagree	30.6%	50.0%	14.3%	30.4%	16.7%
Strongly Disagree	16.7%	16.7%	14.3%	17.4%	16.7%

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Q53: When you left your most recent job, was there anything the company could have done to have kept you working there?*					
Net Answering	n=36	n=5	n=7	n=24	n=11
No, there is/was nothing they can do/could have done.	27.8%	--	28.6%	33.3%	--
Company closed/department dissolved/laid off	8.3%	--	28.6%	4.2%	45.5%
Increased schedule flexibility	--	--	--	--	9.1%
No, personal circumstances caused me to leave.	5.6%	40.0%	--	--	18.2%
Changed policies (i.e., pregnancy leave)	--	--	--	--	9.1%
Increased support/resources	--	--	--	--	9.1%
Increased job responsibilities/challenge of work	--	--	--	--	9.1%
Promotion/Raise/Increase Salary	8.3%	--	--	12.5%	--
No, I retired.	16.7%	--	--	25.0%	--
Increased respect (from leadership/boss)	8.3%	40.0%	14.3%	--	--
Yes - unspecified.	8.3%	--	14.3%	8.3%	--
Better human resources department	2.8%	--	--	4.2%	--
Yes, if they did not eliminate my position	8.3%	--	14.3%	8.3%	--
Change in business strategy/vision/goals	2.8%	--	--	4.2%	--
More clearly defined career path	2.8%	20.0%	--	--	--
Q54: What are your future plans?					
Net Answering	n=37	n=6	n=7	n=24	n=12
Return to school to pursue another degree	5.4%	16.7%	--	4.2%	--
Look for a different job within the same company.	--	--	--	--	--
Look for a different job within a different company in a similar industry	--	--	--	--	16.7%
Look for a different job within a different company in a different industry	13.5%	50.0%	14.3%	4.2%	8.3%
Look for a similar job within a different company in a similar industry	13.5%	33.3%	28.6%	4.2%	25.0%
Look for a similar job within a different company in a different industry	--	--	--	--	--
Unsure	16.2%	--	57.1%	8.3%	41.7%
Remain retired	51.4%	--	--	79.2%	8.3%
Q54: If you will look within a different industry, please describe which industry or industries you will consider:**					
Net Answering	n=15	n=4	n=3	n=8	n=4
Printing	6.7%	--	33.3%	--	--
Design (graphic, unspecified, etc.)	--	--	--	--	25.0%
Education/Teaching	13.3%	--	33.3%	12.5%	--
Government/Non-Profit	6.7%	25.0%	--	--	--

**Answers have been coded.

Appendix A: Response Frequencies

Questions	Total SPM	SPM, 20 - 29 years	SPM, 30 - 44 years	SPM, 45+ years	Total GD
Unsure	6.7%	--	33.3%	--	25.0%
N/A	13.3%	--	--	25.0%	--
Start own company	6.7%	--	--	12.5%	--
Miscellaneous/Other	13.3%	25.0%	--	12.5%	--
IT/Software	6.7%	--	--	12.5%	--
Fine Arts & Film	--	--	--	--	25.0%
Environmental/Sustainability	6.7%	--	--	12.5%	--
Financial	6.7%	--	--	12.5%	--
Color Science	--	--	--	--	25.0%
Law	6.7%	25.0%	--	--	--
Publishing	6.7%	25.0%	--	--	--
END OF UNEMPLOYED/OTHER STATUS SURVEY QUESTIONS					
Q55: If you would like to be entered into the prize drawing, please enter your e-mail address here:*					
Net Answering	n=352	n=104	n=110	n=138	n=246
Q56: If you would like to be notified when the final survey results are released, please enter your e-mail address here:*					
Net Answering	n=301	n=88	n=99	n=114	n=203

*In keeping with our privacy policy, we are not releasing the email addresses provided to us. We have provided counts of e-mail addresses to indicate the level of response to the prize drawing.

Appendix B: Factor Analysis & Factor Regression

A factor analysis of the job facet satisfaction measures was conducted in order to analyze the categorical effects of job facet satisfaction on overall job satisfaction (see Table 1 below). The analysis was conducted using all data (SD and SPM), as the analysis could not be completed with SPM alone due to the need for a larger data set. The factor analysis (principal component analysis with oblimin rotation) revealed six components, which we labeled as: **Leadership**, **Work/Life Balance**, **Lack of Interesting Work**, **Salary**, **People**, and **Location**. The composition of each of these components and the associated factor loadings are discussed in the following paragraph.

Leadership was composed of satisfaction with the organization's ethical standards (0.815), the organization's goals/mission/vision (0.854), and effectiveness of organizational leadership (0.752). **Work/Life Balance** was composed of satisfaction with the flexibility to do one's work when and how one likes (0.555) and the ability to balance work and the rest of one's life (0.697). **Lack of Interesting Work** was composed of satisfaction with the level of challenge in work (-0.782), personal gratification felt from doing one's job (-0.728), and the opportunity to be creative (-0.797). **Salary** was composed of satisfaction with one's salary (0.740). **People** was composed of satisfaction with human diversity of the workplace including gender and ethnicity (0.636), relationships with coworkers (0.886), and the relationship with one's immediate supervisor/boss (0.589). **Location** was composed of satisfaction with the proximity of work to one's home (0.755).

Table 1. Factor analysis results with eigenvalues

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	8.004	34.802	34.802	8.004	34.802	34.802	5.014
2	1.524	6.628	41.430	1.524	6.628	41.430	2.774
3	1.432	6.225	47.655	1.432	6.225	47.655	4.739
4	1.248	5.426	53.081	1.248	5.426	53.081	3.915
5	1.161	5.047	58.128	1.161	5.047	58.128	3.961
6	1.046	4.549	62.677	1.046	4.549	62.677	1.598

Table 2. Factor loadings (pattern matrix)

Level of Satisfaction with:	Component					
	1	2	3	4	5	6
Organization's ethical standards	.815	.055	.002	-.015	.077	-.065
Organization's goals/mission/vision	.854	-.071	-.043	.022	-.070	.138
Effectiveness of organizational leadership	.752	.088	-.109	.049	.046	-.046
Job security	.345	-.162	-.102	.371	.036	.213
Level of challenge in work	.102	-.128	-.782	.113	-.027	-.092
Personal gratification you feel from doing your job	.132	.103	-.728	.083	-.003	.015
Quality of service/product provided/produced	.321	.005	-.547	-.248	.049	.249
Opportunity to be creative	-.144	.078	-.797	.032	.108	.008
Human diversity (gender, ethnicity)	.009	-.320	.033	.176	.636	.265
Relationships with coworkers	-.088	.096	-.037	-.102	.886	-.071
Relationship with immediate supervisor/boss	.285	.233	-.062	-.017	.589	-.300
Fringe benefits	.250	.015	.142	.620	.123	-.052
Amount of on-the-job stress	.265	.587	.109	.177	.023	.014
Potential for career/professional advancement	.156	.066	-.364	.475	.037	-.148
Support for continuing education/in-service programs	.208	.138	-.238	.493	-.042	-.110
Salary	-.155	.087	-.172	.740	-.016	-.034
Accessibility/proximity of childcare services	-.038	.228	.108	.473	.042	.360
Proximity of work to your home	.063	.213	-.031	-.092	-.004	.755
Work environment or work culture	.340	.248	-.114	.043	.371	.174
Respect by upper management	.378	.284	-.129	.106	.353	-.159
Flexibility to do your work when and how you like	-.130	.555	-.395	.070	.121	.097
Ability to balance work and the rest of your life	-.012	.697	-.052	.073	.032	.257
Level of technology employed at the company	.028	-.196	-.264	.315	.256	.226

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

Rotation converged in 15 iterations.

Appendix B: Factor Analysis & Factor Regression

Table 3. Correlations between item and factor (structure matrix)

Level of Satisfaction with:	Component					
	1	2	3	4	5	6
Organization's ethical standards	.842	.228	-.305	.256	.349	.023
Organization's goals/mission/vision	.850	.116	-.326	.282	.247	.208
Effectiveness of organizational leadership	.835	.278	-.411	.333	.359	.058
Job security	.492	.025	-.333	.518	.295	.306
Level of challenge in work	.364	.058	-.804	.321	.256	.013
Personal gratification you feel from doing your job	.432	.292	-.819	.352	.324	.135
Quality of service/product provided/produced	.476	.164	-.634	.060	.302	.313
Opportunity to be creative	.197	.236	-.808	.264	.344	.119
Human diversity (gender, ethnicity)	.225	-.150	-.195	.333	.659	.358
Relationships with coworkers	.206	.226	-.275	.144	.845	.051
Relationship with immediate supervisor/boss	.520	.385	-.358	.255	.699	-.160
Fringe benefits	.430	.173	-.159	.685	.335	.070
Amount of on-the-job stress	.410	.658	-.160	.346	.240	.106
Potential for career/professional advancement	.439	.255	-.562	.627	.334	-.005
Support for continuing education/in-service programs	.445	.304	-.452	.621	.257	.019
Salary	.140	.225	-.338	.749	.212	.092
Accessibility/proximity of childcare services	.162	.327	-.117	.542	.228	.443
Proximity of work to your home	.156	.279	-.159	.092	.155	.768
Work environment or work culture	.585	.434	-.436	.360	.609	.303
Respect by upper management	.618	.460	-.443	.389	.582	-.015
Flexibility to do your work when and how you like	.192	.652	-.532	.298	.345	.210
Ability to balance work and the rest of your life	.205	.747	-.249	.265	.235	.338
Level of technology employed at the company	.283	-.011	-.435	.471	.440	.331

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

A regression analysis using the factor scores for each of the job aspects was also conducted using both SD and SPM data. An r value of 0.685 indicates a correlation between the factors and overall satisfaction, while the r^2 value of 0.469 indicates that 46.9% of the variation in overall satisfaction can be explained by the factor scores. An ANOVA test revealed that this was statistically significant, $F = 75.5$, $p < 0.001$.

Table 4 presents the individual factors that were statistically significant predictors of overall satisfaction. The four factors were: 1) **Lack of interesting work** (beta = $-.431$); 2) **Salary** (beta = $.221$); 3) **Leadership** (beta = $.160$); and 4) **Work/life balance** (beta = $.107$).

Table 4. Significant factor predictors of overall satisfaction

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
(Constant)	2.293	.036		63.636	.000
REGR factor score Leadership	.179	.041	.160	4.405	.000
REGR factor score Work/life balance	.120	.038	.107	3.186	.002
REGR factor score Lack of interesting work	-.483	.040	-.431	-11.984	.000
REGR factor score Salary	.248	.040	.221	6.275	.000

Appendix C: Job Titles by Company Type*

Commercial Printing		
2nd Shift Supervisor	General Manager/ Owner	Production Coordinator - Plant Manager
Account Coordinator	Graphics and Prepress Utility Supervisor / Asst. Dept. Manager	Production Manager
Account Executive	IT/MIS Manager	Program Director
Account Manager	Job Cost Estimator	Project Coordinator
Business Development Manager	Lead Live Job Estimator	Project Manager
C.F.O.	Major Accounts Manager	Sales
Chief Technology Officer	Manager of Information Systems	Sales Associate
Color Assurance Engineer	Managing Director	Sales Coordinator
Color Management Specialist	Marketing Communications Specialist	Sales Representative
Consultant	MIS - Application Developer	Sales to Business Coordinator
COO	National Account Executive	Sales Trainee
Corporate Director	Owner / General Manager	Senior Account Executive
CSR (Customer Service Representative)	Owner/CEO	Senior Account Representative
Customer Care Supervisor	Owner/Partner	Senior Client Service Rep
Customer Service Supervisor	Owner/President	Senior Engineer
Customer Solutions Rep	Partner	SVP Manufacturing
Digital Color Specialist	Prepress Manager	Technical Director Premedia Services
Digital Printing Manager	Prepress Specialist	Vice President
Direct Mail Sales	Prepress Supervisor/Process Manager	Vice President Finance and Administration
Director of Management Services	President	Vice President Operations
Estimator	Print on Demand Center Manager	Vice President Sales & Marketing
Estimator/Customer Service	Printing and DM Consultant (Sales)	VP Operations
Estimator/Pricing Analyst	Printing Sales	VP Sales
First Pressman	Production Coordinator	Workflow Analyst
Publishing		
Assistant Prepress Manager	Graphic Designer	Production Associate
Associate Production Manager	Group Production Director	Production Director
Buyer - Promotion Sourcing	Interactive Media Trainer	Production Manager
Client Relations Executive	Director of Logistics and New Business	Project Manager
Consultant	Editor-in-Chief	Publisher
Data Coordinator	Graphic Designer	Publishing Manager

* Multiple responses have been removed.

Appendix C: Job Titles by Company Type

Database Publisher	Group Production Director	Publishing Systems Manager
Desktop Publisher	Interactive Media Trainer	Quality Engineer
Director	Operations Director	Senior Production Manager
Director of Logistics and New Business	Print Buyer	Systems Consultant
Editor-in-Chief	Production Assistant	VP Manufacturing & Distribution
Advertising		
Assistant Account Executive	Media Services Contractor	Production Mgr/Print Buyer
Desktop Support	National Advertising Production Supervisor	Project Manager
Director of Operations	Print Production Manager	Vice President Strategic Services
Estimator	Print Services Manager	
Marketing Coordinator	Production Manager	
Design Firm		
Freelance Photographer and Graphic Designer	Senior Estimator	VP Business Development
Graphic Designer/Owner	Value Stream Manager	
In-house corporate communications/marketing department		
Account Services Professional	Digital Operations Coordinator	Marketing Production Specialist
Client Care Administrator	Director, Marketing Mgmt - Print Procurement/Fulfillment Operations	Print Production Manager
Communications	Freelance Graphic Designer	Senior Graphic Design Specialist
Corporate Buyer/Planner	Manager, Graphic Services	Sr. Design Manager
Database Marketing Manager	MarCom Specialist	
In-house educational/non-profit communications/marketing department		
Copy Editor	Director of Creative Services	
In-house corporate print shop		
EMDP Manager	Production Manager	Project Manager
Imaging Manager		
In-house educational/non-profit print shop		
Associate Director of Special Events & Conferences	Facilitator of Printing and Graphic Services	Member
Asst Manager	Graphic Arts Instructor	Production Editor
Director	Instructional Support Technician	Research Manager
Director of Printing Services	Manager, Periodicals Production	
Other Firms (Coded)		
Direct Marketing/Mail		
Commercial Sales Director	Quality Assurance Manager	
Education		
Admissions Counselor	CAMS Program Manager	Print Facilities Manager/Adjunct Faculty
Ass't Director of Plant Operations	Center Director	Professor

Appendix C: Job Titles by Company Type

Assistant Director of Postsecondary Education	Coordinator of Education and Safety Programs	Teacher
Assistant Language Teacher	Graduate Advisor - Greek Life	Teacher - Graphic Communications
Assistant Professor	Graphic Designer	University Lecturer
Associate Director of Alumni Relations	Instructor	User Experience Designer
Associate Director of Special Events & Conferences	Instructor, Academic Advisor	Visiting Professor
Printing Product Manufacturer		
Account Director	Color Scientist Engineer	Sales Engineer
Account Executive	Graphics Engineer	Senior Systems Engineer/Analyst
Government and Government Agencies		
Contracting Officer	Printing Specialist	Senior Technical Printing Specialist
Financial Analyst	Production Specialist	Visual Information Specialist
Intelligence Analyst	Purchasing Technician	
Document Services		
Communications Manager	Customer Service Specialist	Product Marketing Manager
Courier with FedEx	Manager, Manufacturing Systems	
Consumer Products		
Director of Packaging Development	Senior Graphic Designer	Senior Programmer/Analyst
Packaging Graphics Associate Manager	Senior GUI Designer	Software Engineer
Product Manager	Senior Package Engineer	
Consulting & Recruiting		
Account Manager	President	Senior Research Analyst
Business Owner	Principal Consultant	Technical Services Manager
Consultant	Recruiter/President	
Consultant, On Demand Printing and Publishing Services	Senior Consultant	
Paper & Printing Supplies		
Branch Manager	Printing Technologist	Senior Sales Representative - North-eastern U.S.
Development Engineer	R & D Technician	Technical Sales Rep
President	Sales Director, Brand Protection	
Marketing (Unspecified Company/Industry)		
Designer/Developer	Purchasing Director	Regional Field Analyst
Production Supervisor		

Appendix C: Job Titles by Company Type

Software & IT		
Associate Product Development Manager	QA Manager	Sr Manager Oracle applications
Director Business Development	Regional Account Manager	SVP Sales and Marketing
Embedded Software Engineer	Sales Director	Systems Engineer
President, American Press Technologies, Inc.	Senior Color Scientist	Tech Support
Program Manager	Solutions Development Director	
Prepress		
Digital photo retoucher	Production Manager / Customer Service Representative	Quality Technician
President		
Financial Printing		
Deal Manager Associate	Director, Pricing	Operational Planner/ Print Procurement
Director, Output Management	Manager of Customer Service	Regional Service Manager
Package & Label Printing		
Corporate Production Control Manager	Night Shift Coordinator	Process Engineer / Plate & Screen Department Manager
Customer Relationship Manager	Owner	Quality Manager
Estimator	Pre-Press-Color Separator	Quality Manager
Flexographic Printing Technologist	Prepress Team Leader	Senior Package Designer
Self-Employed		
Art Director/Designer	Web Designer	
Miscellaneous/Non-Printing		
Account Executive	Manager, Systems Development	Sales Manager
Broker	Marketing Operations Coordinator	Senior Pastor
Building Manager	Marketing/ Personal assistant	SunTrek Tour Guide
Business Research Analyst	Owner, Honda Motorcycle Franchise	System Analyst / Application Developer
Deal Executive	President and CEO	Systems Engineer
Interior Design/Blind & Shutter Sales	Sales Associate	
Architecture		
Senior Environmental Scientist		
Healthcare & Hospitals		
Data Analyst		
Book Manufacturing		
Bindery Manager	Plant Manager	
Retail		
Co-Owner JB's Tennis Shop Manager	Retail Sales	Sr Instructional Designer

Appendix C: Job Titles by Company Type

Digital Printing		
Biller/Estimator	President	Sales Manager
Major Account Executive	Sales Associate	Strategic Account Manager
Manufacturing (General, Non-printing)		
Foreman	National Sales Support Specialist	Quality Associate
Printing Equipment Manufacturer		
Application Support Manager	Product Marketing Manager	Technical Solutions Specialist
Business Development Consultant	Project Manager	Territory Manager
Design Engineer	Technical Information Specialist	VP of Marketing
Director, Sales Operations	Technical Marketing Analyst	
President - General Manager	Technical Sales Manager	



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