

THE INTERNATIONAL JOURNAL OF BUSINESS & MANAGEMENT

Discovering Preference and Purpose in the Integration of Digital Technology at Work: A Scale Development and Study of Generational Differences Managing Work and Life

Dr. Donna L. Haeger

Professor, Cornell University, S.C. Johnson College of Business, New York, USA

Abstract:

Managing people in organizations is becoming more complex in the digital age. As devices beyond computers in the form of smartphones, tables, smart watches and fit bands become the new normal, people of all generations are adapting to technologies to tend to work and life tasks. Generational differences in preference and purpose signal a stark contrast in how people navigate the day. This paper highlights the development of a Preference and Purpose (PnP) measure that explores what tools people typically use for work and life tasks. More pointedly, the specific choices for work versus life tasks is surfaced within each generational cohort. There is a striking link between freedom and autonomy in the use of these tools for the Millennial cohort in particular when it comes to life related events.

Keywords: *Generational, management, digital, technology, preference, purpose, work, life, satisfaction, freedom, autonomy, email, text, social media, virtual, fusion*

1. Introduction

As technology catapults us into the future, the nature and approach to work is changing rapidly. In the past, we managed to keep our work separate from our personal life, but work and life have collided through digitization. Technology has shifted the way we view work and life, changing the common goal of striking a balance between our work and personal responsibilities. With the workplace changing more rapidly than ever before, the question becomes, are our work and personal lives still truly separate? A Preference and Purpose (PnP) scale is developed to provide a measure gauging when and for what purpose certain technologies are used by people of disparate ages. The scale is a meta- investigation into technology use divided into work tasks and life tasks by generation. A data set is compiled and utilized in the development of the scale. The aim of the research is to expand the body of knowledge around digital tools that are leveraged at work and how generational differences have implications for managing this newly diverse workforce (Haeger & Lingham, 2014). Results are validated to form a reliable scale with strong psychometric properties. The scale is further tested within a model of existing scales to explore its impact on outcomes and to confirm the scale itself stands alone as a strong measure. The study further highlights what tools used at work impact a person's freedom and autonomy and which directly affect satisfaction levels.

The goal of the PnP scale development is to expand the psychometric properties—and ultimately the validity—of individual-differences measures surfaced in the Work-Life Fusion scale (Haeger & Lingham, 2014; Reise, Waller, & Comrey, 2000). The Work-Life Fusion scale is a strong measure when determining the degree to which people and thus a work environment is actually fused. Work-Life Fusion (WLF) is defined as the concurrent management of work and life demands while at work. In its entirety, the scale measures degree to which a person is living a fused life. The new PnP scale offers the opportunity to both raise scale reliability and drill down specifically into what tools each age group uses and for what purpose. It is hypothesized that these results will be different among generational cohorts and that different preferences and purposes will lead to differing levels of satisfaction levels. Understanding generational differences in preference and purpose is useful to leaders, managers and organizations including all work force participants because shared understanding leads to improved interactions, less confusion, better communication and policies that retain employees.

2. Digitization and Generations

Dependence on technology has increased exponentially over the past decade to the point that it has become omnipresent. Due to this influx of technology, the ways in which we perform our jobs is shifting (Haeger & Haeger, 2017). Technology use in our daily lives has become mainstream. It is common to see employees using hand held phones and other devices to check in on personal issues or manage work tasks. It is known that people of different ages leverage technology in different ways. This study explores exactly how technology is used at work. It details what specific tools are used for work and what specific tools are used for personal life while at work. This study highlights people of different ages are not using the same technology for the same purposes.

In the year 2015, Millennials surpassed Gen Xers as the largest generation in the U.S. workforce.¹ Millennials are part of an unprecedented phenomenon in which work and life are managed as a whole, integrated to the point that they are virtually inseparable. In recent studies, the concept of Work-Life Fusion (WLF) was examined by Haeger and Lingham (2013)(2014) surfacing an introductory understanding of how members of different generations leverage and experience technology. The newest generation to the workforce grew up with access to technology such as computers, cell phones, and the Internet. With access to these tools, the way they manage both their work and their lives is far different from the generations preceding them. What once was a simple way of managing work and life has evolved into a myriad of different approaches, all influenced by technology. The advent of the digital age has led to a shift in the way people of different generations manage their work and personal lives. Each generation brings not only their talents and skills to the work environment, but also their own expectations. These differences often result in conflict and unnecessary frustration between people and their organizations. As people utilize new technology in their jobs, organizational policies continue to develop around what is or is not appropriate in the workplace. Policies, which, if restrictive, can affect an employee's job satisfaction. To foster productivity and teamwork, we must strive to have a shared understanding of how each approach work and life. Companies and business owners that can accommodate an environment where digitization of work and life has become the norm will be able to retain more.

Consider the manager that cannot understand a worker's attachment to her smartphone. Alternatively, the young leader that cannot get his senior employees to learn a new software at the drop of a hat. These collisions are part of a fundamental difference in perception and exposure when it comes to technology and work-life management. Millennials are the first generation in which this change is apparent. For them, work and personal life do not exist separately, but concurrently, in a fused state in which each overlaps the other seamlessly.

Employers have kept abreast of workplace studies that relate to employee happiness and satisfaction and many have implemented policies to promote employee wellbeing in an effort to maximize productivity and reduce turnover. Telecommuting marked a significant change in the way people manage their personal and professional lives. Since the advent of the Internet and the digital age, we have been hurtling toward a new way of living and working. As technology such as email, texting, and social media continues to influence us in all areas of life, the separation is disappearing. Work and life have folded in on each other and are merging in new and unexpected ways. As technology becomes more and more a part of our daily lives, certain tools and their availability at work has a larger impact on a person's perceived autonomy at work. As people utilize new technology in their jobs, organizational policies continue to develop around what is or is not appropriate in the workplace. Policies, which, if restrictive, can greatly affect an employee's job satisfaction. These policies affect generational groups differently and affect how people understand each other at work. Most importantly, the idea of autonomy and freedom at work has surfaced as a strong influencer of these outcomes. People like to feel trusted and free at work. They like their employers to allow them the latitude to get their jobs done without hovering and they desire the freedom to control where, when, and how they do their jobs(Kossek, Lautsch, & Easton, 2005). Researchers call this psychological job control; the amount of freedom and autonomy one perceives to have in a(Kossek et al., 2005). Researchers call this psychological job control; otherwise known as the amount of freedom and autonomy you perceive you have in your job.

3. Methodology

This paper explores the digitization phenomenon by designing an instrument that details preference for tools and purpose of use. The preference and purpose scale (PnP) is a rigorous measure of how different age groups leverage digital tools for work and life. The study further explores the impact using certain technologies at work have on Work Life Satisfaction(Valcour, 2007), Job Satisfaction(Fields, 2002), Satisfaction with Life (Diener, Emmons, Larsen, & Griffin, 1985)and Psychological Job Control(Kossek et al., 2005). Psychological job control is otherwise known as the amount of freedom and autonomy you perceive you have in your job. Satisfaction with life is suited for use with different age groups (Diener et al., 1985). After nearly a century of such studies, we now know that quality of work life is critical to beneficial outcomes related to job satisfaction, work-life satisfaction, and a sense of well-being with life in general.

The scale development procedures are based on rigorous processes outlined by Worthington and Whittaker (2006), Cabrera-Nguyen (2010), and DeVellis(2003). In the study, Baby Boomers are defined as those individuals born between 1943 and 1964, Generation X (or GenXers) born between 1965 and 1979 and Millennials born between 1980 and 1996. The following scale development will be a deductive one informed by two studies based on the theory of a fused work environment (Haeger & Lingham, 2014; Haeger & Lingham, 2013). The items developed for the proposed scale expands this model by designing an instrument that details preference for tools and purpose of use; two dimensions that are not present in the WLF scale. The WLF scale items can be viewed in Appendix 1. The refined scale is a more accurate and rigorous report and measure of who is using what tools to perform which tasks at work. The focus is on design and validation followed by testing the psychometric properties of the scale established.

Respondents were located using electronic communications via a survey administration service. The instrument design incorporates a 5-point Likert scale. It was offered to working professionals who voluntarily reported. The research sample included people from three generations. While additional demographics were obtained, for the purpose of consistency, generational groups will be highlighted in this paper. The proportion of male to female respondents was 204:320 respectively and the proportion for generations were equal at Boomer, Generation X and Millennial values of 174:176:174 responses. The similar values in age group was purposeful in order to establish a dataset that is balanced and meaningful. The study was employee specific rather than industry specific. The diversity of

¹Fry, R. (2015, May 11). Millennials surpass Gen Xers as the largest generation in U.S. labor force.

respondents offers some level of generalizability moving forward. At the conclusion of data collection, three surveys were excluded since birth year was identified as the missing value. Birth year is foundational to the analysis by generational cohort and as such, records without this data cannot be imputed, implied or assumed for the sake of accuracy. A construct definition table (Table 1) follows including existing scales used to test the PnP scales impact on satisfaction levels.

Construct Name	Construct Definition	Source
Existing Scales		
Job Satisfaction	Overall satisfaction with job.	(Fields, 2002)
Work Life Balance	A person's satisfaction with work and life balance	(Valcour, 2007)
Psychological Job Control	Individual's perceptions of one's personal freedom to control where, when, and how one did one's job.	(Kossek, Lautsch, & Eaton, 2005)
Satisfaction with Life	One's own global assessment of life satisfaction as a cognitive measure.	(Diener, Emmons, Larsen, & Griffin, 1985)
Preference and Purpose (PnP) Scale Definition		
<i>The degree to which an individual leverages different technology for different purposes while at work to simultaneously tend to work and life matters.</i>		
Proposed Scale Dimensions Preference and Purpose (PnP) Measure		
Virtual Visual (webcam)	The extent to which this tool is leveraged to organize and accomplish work and personal life matters .	
Social Media Usage Work	The extent to which this tool is leveraged to organize and accomplish work.	
Social Media Usage Family	The extent to which this tool is leveraged to organize and accomplish personal life.	
Chat or Text Usage Work	The extent to which this tool is leveraged to organize and accomplish work.	
Chat or Text Usage Family	The extent to which this tool is leveraged to organize and accomplish personal life.	
Email Usage Work	The extent to which this tool is leveraged to organize and accomplish work.	
Email Usage Family	The extent to which this tool is leveraged to organize and accomplish personal life.	

Table 1: Construct Definition Table

Items included in the PnP scale are listed below (Table 2). A great deal of thought and care were taken to develop the items for the survey and were worded similarly for each construct. The items resemble previous studies, but have been adapted and expanded to capture technology preference and purpose. As can be seen in the table, each factor in the new scale attempts to isolate when a digital tool is use and for what purpose. It was expected that these items would result in eight separate factors with which to confirm and validate the scale. Ultimately, the virtual dimension acts as one factor in the model, which is consistent with the research. It is treated as such moving forward.

Preference and Purpose-WLF Scale
Items
<i>During the work day:</i>
I use visual (web cam) media to do my work.
I use visual (web cam) media to get work done anywhere.
I use visual (web cam) media to get work organized.
I use visual (web cam) media to manage my personal life.
I use visual (web cam) media to manage my personal life anywhere.
I use visual (web cam) media to get personal life issues organized.
I use social media to get work done.
I use social media to get work done anywhere.
I use social media to keep my work organized.
I use social media to manage personal life matters.
I use social media to manage personal life anywhere.
I use social media to get my personal life organized.
I use methods like chat or texting to get work done.
I use methods like chat or texting to get work done anywhere.
I use methods like chat or texting to get my work organized.
I use methods like chat or texting to manage personal life matters.
I use methods like chat or texting to manage personal life anywhere.
I use methods like chat or texting to get my personal life organized.
I use an email account to get work done.
I use email to get work done anywhere.
I use email to get my work organized.
I use email to manage personal life matters.
I use email to manage personal life anywhere.
I use email to get my personal life organized.

Table 2: Preference and Purpose (PnP) Scale Items

3.1. EFA

Evaluation of the factor structure is conducted to determine variable relationships based on inter-correlations to prepare variables in the model for a deeper investigation through structural equation modeling (SEM). (Gaskin, 2016) In order to confirm adequacy, validity and reliability, permutated Exploratory Factor Analysis (EFA) was conducted using SPSS version 24 with Principle Axis Factoring (PAF) and Promax rotation. EFA was conducted on the full survey results to determine proper item loadings on factors. The EFA was conducted to analyze the data (n=524) for factor structure in order to confirm homogenous item groupings (Worthington & Whittaker, 2006). Acceptable loadings greater than .5 were observed on all factors(Hair, Black, Babin, & Anderson, 2001). The pattern matrix was acceptable as all factors load well; however, it is notable that the virtual constructs for work and life did not load separately like all others. While other items resulted in a work construct and a family construct as expected, virtual loaded as one

aggregate factor. This is not surprising since the construct surfaced in the same way in a previous study on WLF. It appears the concept of a virtual world is universal today regardless of what tasks we are tending. Moving forward we treat this factor in aggregate since it serves and supports the model well. This leaves eleven rather than twelve factors; seven related to the new scale and including four dependent variables. The data analysis returns significant KMO at .899 and Bartlett’s significance of .000. Communalities for the seven new factors are all extracted at greater than .7. For these 11 factors model, there is (1%) non-redundant residuals with absolute values >0.05.

3.2. Convergent and Discriminant Validity

In order to establish Discriminant Validity, cross loadings were addressed. Since the items were written with care based on previous study, it is not surprising that there were no low loadings or cross loading issues that proved problematic or required item trimming. All factor loadings for the new scale were greater than .720 and cross-loadings did not show more than a .15 difference between any two cross loadings (Worthington & Whittaker, 2006). The EFA yielded an 11-factor model with the inclusion of the four dependent variables from existing scales. Total variance explained is 77.7%. Results of thorough validity and reliability testing can be seen in the following pattern matrix (Table 3) and reliability table (Table 4).

Pattern Matrix ^a							
	Factor						
	Virtual	Email Family	Chat/Text for Work	Social Media for Work	Email for Work	Chat/Text Family	Social Media Family
VVF1	0.884						
VVF2	0.909						
VVF3	0.922						
VWV1	0.916						
VWV2	0.905						
VWV3	0.930						
SMF1							0.951
SMF2							0.928
SMF3							0.729
SMW1				0.920			
SMW2				0.952			
SMW3				0.914			
CTF1						0.928	
CTF2						0.970	
CTF3						0.790	
CTW1			0.920				
CTW2			0.987				
CTW3			0.929				
EMF1		0.927					
EMF2		0.975					
EMF3		0.864					
EMW1					0.914		
EMW2					0.847		
EMW3					0.858		

Extraction Method: Principal Axis Factoring.
a. Rotation converged in 8 iterations.

Table 3: Pattern Matrix

Factor Label	Cronbach's Alpha
Virtual Visual	0.961
Social Media Usage Work	0.964
Social Media Usage Family	0.936
Chat or Text Usage Work	0.966
Chat or Text Usage Family	0.956
Email Usage Work	0.923
Email Usage Family	0.955
Scale as an aggregate measure	.946

Table 4: Reliability Table

In summary, it is clear that the results of the exploratory factor analysis indicate the factor structure has strong factor reliability with distinct constructs (discriminant validity) where each factor is measuring something different from the others (convergent validity). This factor structure is more than adequate for further development of the proposed model.

3.3. CFA

In order to confirm the hypothesized factor structure extracted in the EFA, a Confirmatory Factor Analysis (CFA) using SPSS/AMOS version 24 (Byrne, 2010) was conducted on the factored scale items (n=524) to establish further validity and reliability of the model. The CFA analysis with 524 responses provides a robust ratio of 12 responses per item excluding demographic questions and allows model confirmation both within and between populations (Reise et al., 2000). The model of the factor structure was designed based on previous studies and the intent to specify preference and purpose in the measure and to test the correlations proposed. A preliminary model fit is achieved with modest adjustments to error term covariance on the virtual factor. No items required trimming. The model holds as expected with goodness of fit statistics at acceptable levels (CMIN/df = 2.086; CFI = .992; NFI = .985; RMSEA = .046; PCLOSE = .609). The results of the CFA (Figure 1) provided strong model fit at this stage. (Kenny, 2012)

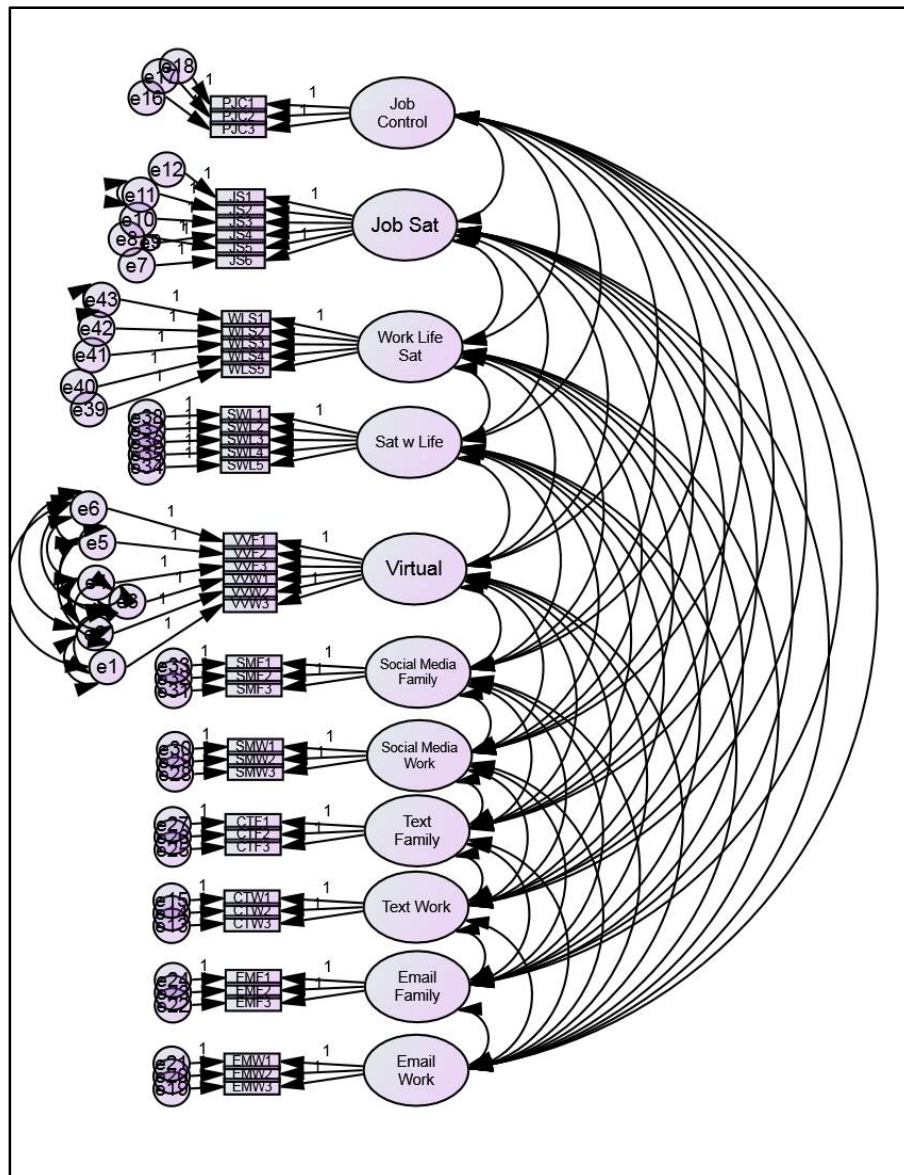


Figure 1: Structural Model

Next, convergent and discriminant validity as well as reliability are confirmed before moving on to test the causal model. The main goal is to be sure that variables correlate with the proper factors established in EFA (convergent) and that they do not correlate more with another factor (discriminant). Thresholds of reliability are aimed at CR>.7, convergent validity AVE>.5 and MSV<AVE (Hair et al., 2001). As can be seen from the table below (Table 5), all thresholds were met with the model. Composite reliability which takes co-varied error terms into consideration (Raykov, 2004) show values relatively close to the Cronbach's values listed above for each construct.

	CR	AVE	MSV	MaxR(H)	JOBCON	Virtual	JobSat	TXTW	EWORk	EFAM	TXTFAM	SMW	SMF	SWL	WLS
JOBCON	0.831	0.625	0.254	0.888	0.790										
Virtual	0.961	0.803	0.249	0.978	0.156	0.896									
JobSat	0.913	0.639	0.254	0.983	0.504	0.156	0.800								
TXTW	0.967	0.906	0.338	0.989	0.117	0.411	0.148	0.952							
EWORk	0.924	0.801	0.324	0.991	0.142	0.210	0.035	0.511	0.895						
EFAM	0.955	0.877	0.430	0.992	0.082	0.206	0.010	0.373	0.569	0.936					
TXTFAM	0.957	0.882	0.430	0.994	0.031	0.238	-0.004	0.557	0.510	0.656	0.939				
SMW	0.964	0.900	0.338	0.995	0.095	0.499	0.166	0.581	0.360	0.232	0.333	0.949			
SMF	0.939	0.838	0.416	0.995	0.072	0.405	0.060	0.515	0.423	0.502	0.645	0.573	0.915		
SWL	0.887	0.613	0.232	0.995	0.317	0.219	0.430	0.113	0.114	0.058	0.115	0.152	0.164	0.783	
WLS	0.931	0.729	0.232	0.996	0.359	0.052	0.414	-0.035	0.007	0.051	-0.006	0.026	0.023	0.482	0.854

Table 5: Construct Validity Table

The tested and validated scale consists of seven subscales, each of which perforates a different aspect of the overarching concept of Preference and Purpose in a world where work-life fusion has become pervasive. The seven subscales contain items that are an assessment of what methods are used and for what purpose.

3.4. Common Method Bias and Invariance Testing

In order to be sure that the model does not have systematic response bias or one factor that explains the majority of the variance, the Common Latent Factor test is employed with success (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Method variance looks for variance in measurement that is a result of the instrument rather than from the constructs being measured (Spector, 1987). Method bias is considered one of the main sources of measurement error (Podsakoff et al., 2003). The comparison of regression weights with and without the common latent factor indicates that 0% of the variance in our items is explained by a common factor. Using a single survey instrument does not appear to have biased the results. Since a marker variable is not captured in the survey, the marker variable test is not employed. The model was next tested for configural invariance to determine whether the factor structure represented in the CFA achieves adequate fit when both groups are tested together and freely. Using gender groupings, the measurement model has good fit when estimated freely, and when measuring gender simultaneously (CMIN/df = 1.652; CFI = .9552; NFI = .895; RMSEA = .035; PCLOSE = 1.00). The modification index does not indicate further adjustments to the model. The results indicate that the two groups are equivalent; therefore, the model has configural invariance. A final step before moving on to the measurement model is the Metric Invariance test. A chi-square difference test on the two groups is performed and evaluated. Comparison of the unconstrained to the constrained model in this case surface results supporting the model is in fact invariant since the P- value is greater than .05 (.541) which is non-significant; these two groups are not statistically different.

3.5. SEM

In order to establish the nomological validity of the scale, Structural Equation Modeling (SEM) is used to test the scale with satisfaction measures used in current research. Nomological validity provides evidence by testing the constructs relationship to other existing or related constructs in the literature and evaluating the affects. (Iacobucci, Ostrom, & Grayson, 1995). The goal is to highlight the PnP scale's ability to influence relationships among other important satisfaction variables relevant in the literature. By building and testing a structural model, goodness of fit is achieved; CMIN/df = 2.086; CFI = .992; NFI = .985; RMSEA = .046; PCLOSE = .609.

Without adaptation, a Work Life Satisfaction scale from Valcour (2007), a Satisfaction with Life scale from Diener, (1985), and a Job Satisfaction scale from Fields (2002) are used. Also included is the Psychological Job Control (PJC) scale adapted from Kossek, Lautsch, & Eaton (2005) due to the proven influence PJC has on Job Satisfaction in work-life balance literature. The goal was to explore what influence preferences and purposes within a Work Life Fusion scale has on these already established relationships and to what extent these influences differ among generational groups.

Composite variables were created with factor scores in AMOS by using standardized corresponding variables and multiplying them in SPSS/AMOS. Next, a theoretical model is built making adjustments as fit is tested. Fit is accomplished by co-varying error terms and adding three direct paths as indicated by data output values. The model follows (Figure 2).

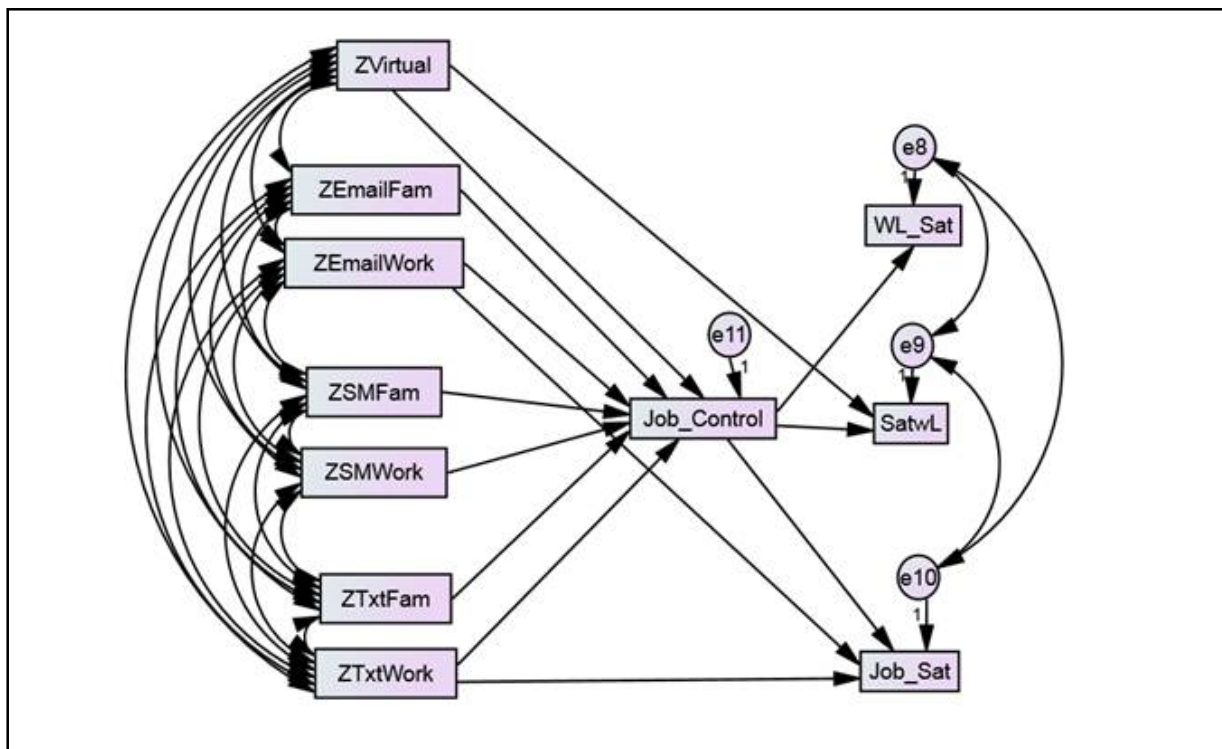


Figure 2: Measurement Model

4. Findings

“Not all individuals react in a uniform manner to the same stressor. Nearly every situational condition or every event may evoke strain in some individuals” (Sonnentag & Frese, 2003). To align with past studies and to maintain the spirit of this scale development, generational differences are the basis upon which the model is tested. Each generational cohort is evaluated for preference and purpose relative to technology used at work to manage work tasks or life tasks. It is proposed that the ability to attend in needed ways with needed tools has an impact on a person’s psychological job control and that in some cases inability (or lack of autonomy) to do so can be a stressor on the job. The notion of autonomy and freedom at work has surfaced as a strong influencer of these outcomes. People like their employers to allow them the latitude to get their jobs done and they desire the freedom to control where, when, and how they do their jobs (Kossek et al., 2005).

The tools one uses and how they affect one’s sense of job autonomy is different depending on age. Tests for this mediation were conducted through bootstrapping set at bias correction in AMOS. Both direct and indirect effects were reviewed to determine if mediation (Mathieu, DeShon, & Bergh, 2008; Mathieu & Taylor, 2006) of psychological job control effects satisfaction levels (WLS JS SWL). Mediation of Psychological Job Control was tested within each generational cohort in order to complement differences in preference and purpose for each age group.

The study hypothesizes that people of different ages will prefer different technology tools for different purposes at work. It also hypothesizes there will be different impacts on satisfaction levels as well as a person’s feeling of freedom and autonomy at work (psychological job control). The tables (Table 6 & 7) below illustrate aggregated results of the N=524 sample as well as results based on generational cohort. Standardized values for direct and indirect effects are included and values have been turned red to indicate significance results for the relationships.

Standardized Direct Effects (Group number 1 - Default model)									
	ZVirtual	ZTxtWork	ZEmailWork	ZEmailFam	ZTxtFam	ZSMWork	ZSMFam	Gender	Job_Control
Job_Control	0.143	0.068	0.144	0.046	-0.143	-0.031	0.008	0	0
Job_Sat	0	0.12	-0.147	0	0	0.092	0	-0.032	0.546
SatwL	0.153	0	0	-0.12	0.158	0	0	-0.012	0.331
WL_Sat	0	-0.074	0	0	0	0	0	-0.01	0.401
Standardized Direct Effects - Two Tailed Significance (BC) (Group number 1 - Default model)									
	ZVirtual	ZTxtWork	ZEmailWork	ZEmailFam	ZTxtFam	ZSMWork	ZSMFam	Gender	Job_Control
Job_Control	0.003	0.356	0.017	0.373	0.054	0.646	0.907	...	...
Job_Sat	...	0.019	0.002	...	...	0.047	...	0.392	0.001
SatwL	0.001	...	...	0.006	0.002	...	...	0.759	0.001
WL_Sat	...	0.055	...	...	...	...	...	0.799	0.001
Standardized Indirect Effects (Group number 1 - Default model)									
	ZVirtual	ZTxtWork	ZEmailWork	ZEmailFam	ZTxtFam	ZSMWork	ZSMFam	Gender	Job_Control
Job_Control	0	0	0	0	0	0	0	0	0
Job_Sat	0.078	0.037	0.078	0.025	-0.078	-0.017	0.004	0	0
SatwL	0.047	0.022	0.047	0.015	-0.047	-0.01	0.003	0	0
WL_Sat	0.058	0.027	0.058	0.019	-0.057	-0.012	0.003	0	0
Standardized Indirect Effects - Two Tailed Significance (BC) (Group number 1 - Default model)									
	ZVirtual	ZTxtWork	ZEmailWork	ZEmailFam	ZTxtFam	ZSMWork	ZSMFam	Gender	Job_Control
Job_Control	...	...	...	...	...	...	...	...	...
Job_Sat	0.002	0.355	0.016	0.366	0.05	0.635	0.913	...	...
SatwL	0.002	0.351	0.014	0.355	0.047	0.617	0.899	...	...
WL_Sat	0.003	0.355	0.016	0.356	0.048	0.626	0.907	...	...

Table 6: Full Group Significance

BOOMER										GenX										Millennial										
Standardized Direct Effects (Boomer - Default model)										Standardized Direct Effects (GenX - Default model)										Standardized Direct Effects (Millennial - Default model)										
	Gender	ZVirtual	ZTxtWork	ZEmailWork	ZEmailFam	ZTxtFam	ZSMWork	ZSMFam	Job_Control		Gender	ZVirtual	ZTxtWork	ZEmailWork	ZEmailFam	ZTxtFam	ZSMWork	ZSMFam	Job_Control		Gender	ZVirtual	ZTxtWork	ZEmailWork	ZEmailFam	ZTxtFam	ZSMWork	ZSMFam	Job_Control	
Job_Control	0	0.026	0.29	0.11	0.213	-0.362	-0.12	-0.024	0	Job_Control	0	0.131	-0.089	0.184	0.031	0.116	0.033	-0.047	0	Job_Control	0	0.256	0.057	0.134	-0.117	-0.156	-0.061	0.185	0	
Job_Sat	0.019	0	0.152	-0.185	0	0	0.141	0	0.665	Job_Sat	-0.076	0	0.095	-0.136	0	0.147	0	0.498	0.475	Job_Sat	-0.02	0	0.157	-0.079	0	0	0.036	0	0.475	
SatwL	-0.054	0.127	0	0	-0.107	0.035	0	0	0.391	SatwL	-0.008	0.203	0	0	-0.051	0.179	0	0	0.277	0.291	SatwL	0.008	0.138	0	0	-0.124	0.178	0	0	0.291
WL_Sat	-0.025	0	-0.037	0	0	0	0	0	0.475	WL_Sat	-0.037	0	-0.034	0	0	0	0	0	0.385	0.359	WL_Sat	0.045	0	-0.043	0	0	0	0	0	0.359
Standardized Direct Effects - Two Tailed Significance (BC) (Boomer - Default model)										Standardized Direct Effects - Two Tailed Significance (BC) (GenX - Default model)										Standardized Direct Effects - Two Tailed Significance (BC) (Millennial - Default model)										
	Gender	ZVirtual	ZTxtWork	ZEmailWork	ZEmailFam	ZTxtFam	ZSMWork	ZSMFam	Job_Control		Gender	ZVirtual	ZTxtWork	ZEmailWork	ZEmailFam	ZTxtFam	ZSMWork	ZSMFam	Job_Control		Gender	ZVirtual	ZTxtWork	ZEmailWork	ZEmailFam	ZTxtFam	ZSMWork	ZSMFam	Job_Control	
Job_Control	...	0.691	0.017	0.377	0.097	0.008	0.252	0.828	...	Job_Control	...	0.087	0.53	0.147	0.709	0.323	0.76	0.708	...	Job_Control	...	0.02	0.58	0.072	0.212	0.132	0.588	0.07	...	
Job_Sat	0.758	...	0.018	0.006	0.024	...	0.001	Job_Sat	0.208	...	0.385	0.143	0.124	...	0.001	0.001	Job_Sat	0.8	...	0.062	0.24	0.614	...	0.001
SatwL	0.489	0.073	0.313	0.721	0.001	SatwL	0.827	0.001	0.554	0.086	0.001	0.001	SatwL	0.896	0.054	0.066	0.015	0.001
WL_Sat	0.723	...	0.572	0.001	WL_Sat	0.599	...	0.581	0.001	0.001	WL_Sat	0.489	...	0.513	0.001
Standardized Indirect Effects (Boomer - Default model)										Standardized Indirect Effects (GenX - Default model)										Standardized Indirect Effects (Millennial - Default model)										
	Gender	ZVirtual	ZTxtWork	ZEmailWork	ZEmailFam	ZTxtFam	ZSMWork	ZSMFam	Job_Control		Gender	ZVirtual	ZTxtWork	ZEmailWork	ZEmailFam	ZTxtFam	ZSMWork	ZSMFam	Job_Control		Gender	ZVirtual	ZTxtWork	ZEmailWork	ZEmailFam	ZTxtFam	ZSMWork	ZSMFam	Job_Control	
Job_Control	0	0	0	0	0	0	0	0	0	Job_Control	0	0	0	0	0	0	0	0	0	0	Job_Control	0	0	0	0	0	0	0	0	0
Job_Sat	0	0.017	0.193	0.073	0.142	-0.241	-0.08	-0.016	0	Job_Sat	0	0.065	-0.045	0.092	0.016	0.058	0.016	-0.023	0	0	Job_Sat	0	0.122	0.027	0.063	-0.056	-0.074	-0.029	0.088	0
SatwL	0	0.01	0.113	0.043	0.083	-0.141	-0.047	-0.009	0	SatwL	0	0.036	-0.025	0.051	0.009	0.032	0.009	-0.013	0	0	SatwL	0	0.075	0.017	0.039	-0.034	-0.045	-0.018	0.054	0
WL_Sat	0	0.012	0.138	0.053	0.101	-0.172	-0.057	-0.011	0	WL_Sat	0	0.05	-0.034	0.071	0.012	0.045	0.013	-0.018	0	0	WL_Sat	0	0.092	0.02	0.048	-0.042	-0.056	-0.022	0.066	0
Standardized Indirect Effects - Two Tailed Significance (BC) (Boomer - Default model)										Standardized Indirect Effects - Two Tailed Significance (BC) (GenX - Default model)										Standardized Indirect Effects - Two Tailed Significance (BC) (Millennial - Default model)										
	Gender	ZVirtual	ZTxtWork	ZEmailWork	ZEmailFam	ZTxtFam	ZSMWork	ZSMFam	Job_Control		Gender	ZVirtual	ZTxtWork	ZEmailWork	ZEmailFam	ZTxtFam	ZSMWork	ZSMFam	Job_Control		Gender	ZVirtual	ZTxtWork	ZEmailWork	ZEmailFam	ZTxtFam	ZSMWork	ZSMFam	Job_Control	
Job_Control	...	...	...	...	...	...	...	...	...	Job_Control	...	...	...	...	...	...	...	...	...	...	Job_Control	...	...	...	...	...	...	...	...
Job_Sat	...	0.7	0.017	0.378	0.094	0.007	0.246	0.832	...	Job_Sat	...	0.066	0.522	0.12	0.708	0.301	0.766	0.693	...	0.001	Job_Sat	...	0.009	0.529	0.051	0.169	0.116	0.546	0.051	...
SatwL	...	0.678	0.011	0.351	0.064	0.004	0.236	0.812	...	SatwL	...	0.053	0.477	0.105	0.661	0.267	0.726	0.662	...	0.001	SatwL	...	0.01	0.5	0.046	0.159	0.097	0.532	0.046	...
WL_Sat	...	0.665	0.014	0.362	0.072	0.005	0.255	0.811	...	WL_Sat	...	0.057	0.493	0.105	0.676	0.263	0.724	0.682	...	0.001	WL_Sat	...	0.007	0.515	0.044	0.149	0.087	0.521	0.039	...

Table 7: Significance by Generation

People of all ages enjoy more satisfaction with their lives if they can plug in at work. While people of different ages do not use the same tools at work, they all agree on one. To stay connected to life while at work, texting is the tool of choice. Whether or not this tool's availability affects their job autonomy, they all agree that being able to text changes how satisfied they feel with their lives. Beyond this common ground, each generation uses different tools for work and life management. Boomers prefer tools like email and texting, which heightens their job satisfaction and gives them a greater sense of freedom and autonomy at work.

The most significant gap in technology use is seen when comparing Boomers and Millennials. The main difference between Baby Boomers and Millennials is not just the kind of technology they are using at work, but the purpose for which they are using it. Using email to get work done is one thing, but checking personal email, texting friends or family, and checking Facebook during one's workday is another. It can be seen that use of technology at work is most associated with psychological job control impacts for millennials when using tools at work for family or personal life management. This phenomenon is very nearly non-existent in the Boomer cohort. This is due to the greater age gap and therefore larger difference in the way each approaches and experiences technology at work. Gen Xers like technology and agree that using email to get work done is an important aspect of work life. Like Millennials, this tool gives us a greater sense of autonomy in our jobs. At work, Gen Xers are content with their lives as long as they can text family and their personal network and beyond that, they simply adapt and go along their merry way. This is most likely a result of their upbringing as well as their relation to neighboring generations.

Not surprisingly, Millennials use and require the most technology while at work. As the first truly fused generation, they tend to both work tasks and personal life simultaneously. This kind of fused approach requires tools like texting and social media in order for them to remain connected with both aspects of their lives and blend them together accordingly. Tools leveraged by Millennials are all in an effort to stay connected to personal life. Texting and social media are both used to stay connected to life outside of work. There is a strong connection between these tools and a Millennial's sense of freedom and autonomy in a job. Without being able to use such tools, a Millennial's satisfaction at work suffers in a number of ways. Satisfaction with life suffers as well. Tools used and how they affect one's sense of job autonomy is different depending on age. For Millennials with a context of work-life fusion as a means for daily function, tools that connect to friends and family while at work aid in a sense of freedom and autonomy. This has been reported to reduce stress, which ultimately leads to increased job satisfaction (Kossek et al., 2005).

5. Discussion

It is clear that people of all ages are using the technology available today. Access to such technology can improve satisfaction levels, whether they are related to one's job or one's life. What is clear, however, is the more technological immersion a person has experienced in their lifetime, the more stressed they feel at work if they cannot use technology to remain connected to friends and family. This is the key difference between Boomers and Millennials. While Boomers utilize and derive satisfaction from technology, they are able to work without some tools if necessary. They do not experience as much stress as Millennials when asked to disconnect from their phones and other technology. Boomers are mostly unaffected by work restrictions dictating when and how they can use technology to connect to their personal lives. They appreciate new technology, but are able to turn away from their personal lives while at work. On the contrary, Millennials cannot do this without experiencing discomfort and some form of stress while attempting to do their jobs.

In one study, Boomers were asked whether being unplugged at work, especially from email, text, and social media, would make them feel stressed or not. Many people of this generation responded that they definitely would not be stressed. As one Boomer explains, "I like access to email and the Internet but I am not constantly on social media, texting people, etc. so this would not be a catastrophe." When asked the same question, Millennials reported that they would be more stressed at work without access to these tools and. When asked why they would be stressed, a common response was that they would feel as if they were out of the loop and missing out on important interactions. As one Millennial puts it, "Work isn't all my life".

The stress factor is the most important difference between Baby Boomers and Millennials. While Boomers have no issue dissociating from certain technologies while at work, many Millennials do. The younger you are, the more wired you are to use and rely on technology. This is the result of immersion in technology from a young age and our continued shift into digital environments. Boomers prefer tools like email and texting, which heightens their job satisfaction and gives them a greater sense of freedom and autonomy at work.

The dawn of the digital age has brought about rapid change in all areas of our lives, especially how we live and work. These changes affect everyone, including the overlooked "middle-child", Generation X. Gen Xers have spent their lives adapting to the tastes and customs of both Boomers and Millennials and, as a result, have become a versatile breed. Like Millennials, they adopt new technology and like Boomers, they do not necessarily need technology at work, but access to texting and other tools is certainly a plus.

6. Conclusion

The workplace is dynamic no matter what type of organization one works in. Managers, who can understand differences that exist within their team, are better equipped to foster relationships, and lead successfully. To foster productivity and teamwork, we must strive to have a shared understanding of how we each approach work and life. Therein lies the greatest benefits in understanding these differences. Happy workers stay in their jobs. This decreases turnover and reduces expenses related to recruitment. Companies and business owners that can accommodate an environment where work-life fusion is becoming the norm will be able to retain more employees and therefore increase profits. Better understanding coworkers of disparate ages will allow employees to work together more effectively. Change is upon us and no matter the generation, all are adapting. For more than a century, we have managed to keep

our work separate from both our personal life and our personal identity, but that time has passed. Work and life have collided. The age of work-life fusion is upon us.

Each group has unique life experiences as well as different levels of technology immersion that have shaped how they think, perceive, and approach the world. On a continuum, we can see that Boomers have had the least exposure to digital tools in their formative years and have learned to leverage digital technology as it became available. On the other end of the spectrum are Millennials born into the digital age and thus have little to no experience of life without digital technology. As technology continues to advance, we are moving away from a balancing act of work and life. We are entering the era of the fused work environment. Millennials are part of an unprecedented phenomenon in which work and life are managed as a whole, integrated to the point that they are virtually inseparable.

To navigate this ever-changing environment, understanding others is crucial. Managers who understand differences that exist within their team are better equipped to foster relationships, and lead successfully. Likewise, employers who can create a comfortable and productive environment for their employees will be more likely to retain talent. In 2005, a research study examined the new trend of telecommuting and how it affected the amount of autonomy workers perceived they had in their job (Kossek et al., 2005). They found that the more control people felt they had over where, when, and how they worked, the lower their depression, work and family life conflict, and turnover intention. Certain technologies at work can make people feel in control of their jobs, leading to greater job and work-life satisfaction. In other words, if people work in an environment that supports technology, they feel they have personal autonomy in getting their jobs done. This reduces their stress and may cause them to feel that their employer trusts them. When technology is supported at work, everyone experiences positive feelings of satisfaction with their lives because they are able to satisfy their need to administer to social obligations while at work. For Millennials, in particular, this is imperative. Quality of work life issues abound with the reality of their need to remain connected to family and personal life while at work.

Seventy-five million Millennials are already fused, but they alone do not drive the need for a technological workplace. Both similarities and differences exist in how all three generations manage work and life. When all must share the workplace, understanding these differences is vital, especially when access to technology has the power to influence a worker's sense of freedom and autonomy. With job satisfaction on the line, no business can afford to ignore the needs of the increasingly diverse workforce. With these technologies at our disposal, the possibilities for managing work and life are endless. How we spend our time tending to work and life responsibilities greatly depends on when we were born and what kind of expectations we have about our workplace. By the year 2020, Millennials will make up 50% of the global workforce.² The support of a technological environment at work is a requirement for this generation as Millennials are psychologically impacted by the availability of digital tools at work. If they cannot access these tools, they feel a loss of freedom and autonomy in their jobs which can bode badly for employers wishing to retain Millennial talent.

²Millennials at work: Reshaping the workplace (Rep.). (2011).

7. References

- i. Byrne, B. M. (2010). *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming* Second Edition. New York Routledge.
- ii. Cabrera-Nguyen, P. (2010). Author Guidelines for Reporting Scale Development and Validation Results in the Journal of the Society for Social Work and Research. *Journal of the Society for Social Work and Research*, 99-103.
- iii. DeVellis, R. F. (2003). *Scale Development: Theory and Applications* 2e. Thousand Oaks: Sage Publications.
- iv. Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, 49(1), 71 - 75.
- v. Fields, D. L. (2002). *Taking the Measure of Work: A Guide to Validated Scales for Organizational Research and Diagnosis*. Thousand Oaks, California: Sage Publications.
- vi. Gaskin, J. (2016). Gaskination's StatWiki. Retrieved from <http://statwiki.kolobkreations.com>
- vii. Haeger, & Lingham. (2014). A trend toward Work-Life Fusion: A multi-generational shift in technology use at work. *Technological Forecasting and Social Change*, 89(Supplement C), 316-325. doi:<https://doi.org/10.1016/j.techfore.2014.08.009>
- viii. Haeger, D. L., & Haeger, E. (2017). *Work-Life Fusion: A Guide to Freedom and Autonomy at Work*: Amazon Kindle Direct Publishing.
- ix. Haeger, D. L., & Lingham, T. (2013). *Work-Life Fusion: A Paradigm Shift In Understanding Work And Life Management: Scale Development, Validation, And Multigenerational Analysis*.
- x. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2001). *Multivariate Data Analysis* 7th edition.
- xi. Iacobucci, D., Ostrom, A., & Grayson, K. (1995). Distinguishing service quality and customer satisfaction: the voice of the consumer. *Journal of consumer psychology*, 4(3), 277-303.
- xii. Kossek, E. E., Lautsch, B. A., & Easton, S. C. (2005). Telecommuting, control and boundary management: Correlates of policy use and practice, job control and work-family effectiveness. *Journal of Vocational Behaviors*, 68, 347-367.
- xiii. Mathieu, J. E., DeShon, R. P., & Bergh, D. D. (2008). Mediation Inferences in Organizational Research: Then, Now, and Beyond. *Organizational Research Methods*, 11(2), 203-223. doi:10.1177/1094428107310089
- xiv. Mathieu, J. E., & Taylor, S. R. (2006). Clarifying conditions and decision points for mediational type inferences in Organizational Behavior. *Journal of Organizational Behavior*, 27(8), 1031-1056. doi:10.1002/job.406
- xv. Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, 879-903.
- xvi. Raykov, T. (2004). Behavioral scale reliability and measurement invariance evaluation using latent variable modeling. *Behavior Therapy*, 35(2), 299-331.
- xvii. Reise, S. P., Waller, N. G., & Comrey, A. L. (2000). Factor analysis and scale revision. *Psychological assessment*, 12(3), 287.
- xviii. Sonnentag, S., & Frese, M. (2003). *Comprehensive Book of Psychology - Stress in Organizations*. New York: Wiley.
- xix. Spector, P. E. (1987). Method Variance as an Artifact in Self-Reported Affect and Perceptions at Work: Myth or Significant Problem. *Journal of Applied Psychology*, 438-443.
- xx. Valcour, M. (2007). Work-based resources as moderators of the relationship between work hours and satisfaction with work-family balance. *Journal of Applied Psychology*, 92(6), 1512-1523.
- xxi. Worthington, R. L., & Whittaker, T. A. (2006). *Scale Development Research: A Content Analysis and Recommendations for Best Practices*. *The Counseling Psychologist*, 806-838.

APPENDIX 1

Web 2.0
I use web 2.0 tools to get my work and family/life aspects organized.
I use web 2.0 tools to get both work and family/life matters done when I am at work.
I use web 2.0 tools to get both work and family/life matters done anywhere.
Skype
I use Skype to get my work and family/life aspects organized.
I use Skype or other web cam media to get my work and family/life aspects organized.
I use Skype or other web cam media to get both work and family/life matters done anywhere.
Social Media
I use social media (Facebook or LinkedIn or forms of online chat) to get both work and family/life matters done when I am at work.
I use social media (Facebook or LinkedIn or forms of online chat) to get both work and family/life matters done anywhere.
I use social media (Facebook or LinkedIn or forms of online chat) to get my work and family/life aspects organized.
Email
I use email to get my work and family/life aspects organized.
I use email to get both work and family/life matters done anywhere.
I manage my work and life at the same time through multitasking.
I use email to get both work and family/life matters done when I am at work.
Face to Face Expectations
I expect my coworkers to communicate with me face to face to get work done.
I expect my coworkers to collaborate with me face to face to get work done.
I expect my friends and family to communicate with me face to face to plan family/life events.
I expect my friends and family to collaborate with me face to face to plan non-work events.
Virtual Expectations
Many things that I do to manage family/life issues are during my scheduled working hours.
I expect my friends and family to communicate with me virtually to plan family/life events when I am at work.
I expect my friends and family to collaborate with me virtually to plan family/life events when I am at work.
I use my computer (desktop/laptop/netbook) to organize my work and family/life.
I use my handheld device to organize my work and family/life.
Concurrent Management
Web 2.0 tools make it easy for me to deal with both work and family/life concurrently.
Social media (Facebook or LinkedIn or forms of online chat) makes it easy for me to deal with both work and family/life concurrently.
Skype or other web cam media make it easy for me to deal with both work and family/life concurrently.