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Exploring Work-Life Conflict in Global Software Development (GSD) Contexts: A Survey of IT Professionals based in India

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EXPLORING WORK-LIFE CONFLICT IN GLOBAL SOFTWARE DEVELOPMENT (GSD) CONTEXTS:

A Survey of IT Professionals based in India

Research-in-Progress

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Abstract

Global Software Development (GSD) is now a mega-trend. While there is a rich literature exploring various facets of the GSD phenomenon, few (if any) studies have focused on the working conditions of IT professionals, specifically their work-life conflict. In this paper, we discuss our research-in-progress on this issue, wherein we empirically examine the effects of four categories of relevant antecedents (individual factors, organizational factors, IS project-based factors, and the nature of personnel distribution in teams) on work-life conflict, and the effect of work-life conflict on outcome variables such as organizational commitment and individual's performance. Analysis of data collected as part of an on-going study show that the measurement instruments are valid and reliable, and many of the hypothesized relationships hold. The aspiration of this study is to be among the first to empirically examine work-life conflict (WLC) issues in a GSD setting.

Keywords: work-life conflict, global software development projects, distributed teams, organizational commitment, performance

Introduction

In their review article, Davis, Ein-Dor, King, and Torkzadeh (2006, p. 773) characterize the GSD phenomenon as "global labor arbitrage," where companies transfer some of their "labor employment to the most advantageous location." Interestingly, while the motivation for DSD/GSD is often to harness appropriate human capital, there appears to be scant attention on the *human issues faced by IT professionals.* Indeed, Niederman, Kundu, and Salas (2006, p. 57) have argued for the need to closely focus on the IT workers who "are affected by offshoring in terms of their immediate and long-term employment." Our review of research on this theme revealed that a limited amount of work has been conducted on the human-related implications of GSD/offshoring, primarily on "job-losses," and how job losses affect the "displaced professional" (Padmanabhan and Palvia 2006, p. 1). Yet, as Niederman et al. (2006) suggest, while focusing on the job losses is useful, there is also a need to investigate issues such as *working conditions of the workforce*, both onshore and offshore, who are actively participating in GSD.

One such "working condition" related issue that is emerging as important in many organizations is the concept of *work-life conflict (WLC)* of its members. Indeed, WLC is now described as a "**strategic imperative** for many organizations" (Greenblatt 2002, emphasis added), and it refers to the imbalance between the "demands of work" and "lives beyond the workplace" (Nord, Fox, Phenix, and Viano 2002, p. 223). WLC has become a priority for organizations, since it has been seen to have significant negative effects on workers' health, general psychological well-being, and productivity (Felstead, Jewson, Phizacklea, and Walters 2002). This is particularly true for IT workers (Quesenberry, Trauth, and Morgan 2006), who often find "it hard to reconcile with the working rhythms of IT work" (Webster 2002, p. 6). The concept of WLC is even more critical for those involved in GSD projects, given the temporal, spatial, and cultural distances with colleagues and clients that GSD workers have to bridge (Oshri, van fenema, and Kotlarsky 2008; Kotlarski and Oshri 2005; Sarker and Sahay 2004); yet there are few (if any) academic studies specifically directed to addressing the work-life conflict of IT professionals involved in GSD. This study seeks to address the void in the literature. Our primary research question is:

RQ1: *What are the key factors that lead to work-life conflict for IT workers involved in global software development (GSD) projects?*

Further, the management and human resource literature argues that WLC has significant negative effects on several job-related outcomes of employees such as organizational commitment and performance. This argument is relevant to the GSD arena as well, where organizations experience employee turnover woes, both in onshore and offshore locations, as a result of employees' WLC. This leads us to our secondary research question:

RQ2: *What is the effect of work-life conflict on GSD workers' organizational commitment and performance?*

We examine the above-mentioned research questions in the context of *Indian IT workers* engaged in GSD. Given the important role of India-based IT professionals in GSD initiatives of many organizations around the globe, it is important to understand the antecedents of their WLC, since WLC has been seen as a key factor affecting the high turn-over rates of Indian IT professionals.

Work-Life Conflict: A Brief Review of the Literature

WLC has been defined as the "inter-(between) role conflict where the demands created by the job interfere with performing family-related responsibilities" (Netemeyer, Brashear-Alejandro, and Boles 2004, p. 50). The concepts of work-life conflict and work-family conflict are often used interchangeably, and Guest (2002, p. 262) argues that the term work-life conflict "is in itself a misnomer and serves simply as a convenient shorthand for work and the rest of life." While work refers to "paid employment," life refers to "activities outside work," which mostly includes family-related issues, but may also include leisure time (Guest 2002, p. 262). Our view of WLC in the context of this study is consistent with Guest (2002) and other work and organizational (W/O) psychologists.

Researchers examining WLC from the individual employees' points of views have focused on uncovering the different reasons due to which WLC increases, and the tactics and resources that can be managed by the employees' in an effort to decrease the level of conflict (e.g., Greenhaus and Beutell 1985). Greenhaus and Beutell's (1985) model surrounding the antecedents of WLC propose "that any role characteristic that affects a person's time involvement, strain, or behavior within a role can produce conflict between that role and another role." Consistent with Greenhaus and Beutell's (1985) model, Quick, Henley, and Quick (2004 p. 428) argue that two important factors that increase WLC are: time-based conflict and strain-based conflict. *Time-based conflict* refers to the conflict that rises when "the time devoted to work makes it difficult to fulfill the obligations and requirements of the family role." For example, staying late at the office (or working late) prevents an employee from missing family activities (such as an evening meal). *Strain-based conflict,* on the other hand, arises when the "pressures of the work

role" spills over and "affect interactions within the family domain" (Quick et al. 2004, p. 428). In other words, significant stresses at work can put an employee in a consistent bad mood, and result in negative interactions with his/her family. In the context of GSD arrangements too, we expect both these types of conflicts to be experienced.

Guest (2002), in proposing his model surrounding the antecedents of WLC, argues that within the broad categories of time and strain-based antecedents of WLC are organizational and individual level factors. For example, within time-based conflict-related antecedents at the individual-level are factors such as the existence of a family (i.e., whether the individual is married and has children), the gender of the individual, and the importance of family and leisure time play an important role (Guest 2002; Kossek, Noe, and Demarr 1999; Greenhaus and Beutell 1985). On the other hand, researchers propose that organizational antecedents within the time-based conflict category include variables such as the employee's schedule flexibility (Greenhaus and Beutell 1985). Among the strain-based conflict variables identified at the individual-level are one's propensity for anxiety (Greenhaus and Beutell 1985), also known as the level of neuroticism. On the other hand, researchers argue that the level of support an individual receives from his/her supervisor is an important strain-based conflict variable at the organizational level (Kossek et al. 1999; Greenhaus and Beutell (1985). Drawing on the model outlined by both Greenhaus and Beutell (1985) and Guest (2002), we examine the impact of both *individual characteristics* and *organizational support-related factors* (under the broader categories of time and strain-based conflict) on the WLC of IT workers involved in GSD. In addition, noting the paucity of studies of WLC in the GSD context, we include two other relevant categories of variables related to distributed IT work, that is, *the characteristics of the distribution itself* (e.g., time-zone differences between the employee and his/her other colleagues) and *the nature of the IT project* (e.g., fluctuations or changes in the clients' requirements). The latter two categories were included based on research on distributed software development (e.g., Sarker and Sahay 2004; Oshri et al. 2008), which has consistently argued that differences of time and space amongst the team members cause significant problems in coordination and communication, which eventually causes more stress for GSD workers. Below, we develop the specific hypotheses.

Research Model

Individual Characteristics-related Antecedents

Family Structure and Work-Life Conflict

The family structure of an employee has severe implications for his/her WLC. Individuals who have dependents have higher "family responsibilities" and tend to experience higher time-based and strain-based conflicts (e.g., Lyness and Kropf 2005, p. 43). Similarly, Greenhaus and Beutell (1985) argue that individuals who have large families with many dependents are likely to face more demands on their time, and thus will experience more WLC. We expect this to be the case even in the context of GSD.

H1: IT workers involved in GSD who have large number of dependents will experience higher work-life conflict.

Value of Family/Leisure Time

Recent research argues that it is the *importance one puts* on family and leisure time that affects the work-life imbalance (e.g., Aryee, Srinivas, and Tan 2005; Greenhaus and Parasuraman 1999). If an employee values his/her family and leisure time highly, he/she will view any other role-defined activity (e.g., teleconferencing with offshore members as part of work), especially when it spills over its normal boundaries, as *interference*, and preventing him/her from enjoying family/leisure (Aryee et al. 2005).

H2: IT workers involved in GSD who value their family/leisure time will experience higher work-life conflict.

Gender and Work-Life Conflict

The impact of gender on work-life conflict has been mixed in the past. Some researchers have suggested that gender does not have a significant effect on WLC, while others have emphatically argued that gender does play an important role, with female employees experiencing greater WLC than male employees (e.g., Lyness and Kropf 2005). Few researchers have also suggested that male employees experience higher WLC than female employees (e.g., Gambles et al. 2006). In the context of IT, Quesenberry et al. (2006) argue that women experience higher WLC since they need to balance "domestic responsibilities while trying to keep pace with a rapidly changing field."

H3: Female IT workers involved in GSD will experience higher work-life conflict.

Neuroticism and Work-Life Conflict

In recent research, "the predictive power of personality variables" on an individual's WLC has been established (e.g., Wayne, Musisca, and Fleeson 2004, p. 109). Among the different variables, the level of anxiety

that an individual typically suffers from (that is, neuroticism), has been argued to be the most potent (Greenhaus and Beutell 1985). Neuroticism refers to "anxiety, insecurity, defensiveness, tension and worry" (Wayne et al. 2004, p. 112). Neurotics spend more time focusing on "worrying" (Wayne et al. 2004, p. 112), and less time on accomplishing their tasks both at home or at work. Thus, neurotics tend to face more family and work-related stress, which in turn increases their WLC (Stoeva et al. 2002); this can be expected in the GSD context as well.
H4: Neurotic IT workers involved in GSD will experience higher work-life conflict.

Organizational Support Characteristics-related antecedents

Availability of Flextime and Work-Life Conflict

Organizational researchers have for long maintained that providing flexible work schedules to employees has a positive effect on their work-life balance (e.g., Lyness and Kropf 2005; Thompson et al. 2004). It has been specifically argued that "flexible work arrangements … provide some control or choice of schedules" to the employees, and allow employees to better balance their work and family responsibilities (Lyness and Kropf 2005, p. 40). This argument is likely to hold for GSD participants as well.
H5: IT workers involved in GSD who have flexible work arrangements will experience lower work-life conflict.

Supervisor Support and Work-Life Conflict

Some researchers suggest that organizational support in the form of flexibility in working hours does not necessarily mean that WLC would decrease, since employees may be reluctant or "afraid" to seek "advantage of benefits such as flextime… because of possible negative career consequences" (Thompson et al. 2004, p. 548). However, the existence of a supportive supervisor who show respect for employees' family lives can help reduce one's WLC (e.g., Allen 2001).
H6: IT workers involved in GSD who have supportive supervisors will experience lower work-life conflict.

ISD Project Characteristics-related Antecedents

Scholarios and Marks (2004) argue that, for IT workers involved in software engineering, work and non-work domains are not separate, but integrated. This is especially true given the demands imposed by software development processes. Thus, it is reasonable to expect that characteristics of their work and projects will affect their work-life conflict (Messersmith 2007).

Uncertain Project Requirements and Work-Life Conflict

One of the core ISD project characteristics that have been argued to influence project stakeholders' stress and performance is the *uncertainty of the requirements* (Nidumolu 1995). Given that "requirements analysis is the most important stage in the development process," a great of time and effort is expended to it, and many ISD workers, especially those involved in GSD with remote clients, find themselves being heavily involved during this phase (Nidumolu 1995, p. 195). Apart from the complications of the requirements itself, uncertainty in the requirements, especially as a result of the fluctuations, can lead to higher conflicts among the users and the analysts (Nidumolu 1995), and the IT offshore worker is likely to find himself/herself spending additional time in resolving these problems at different stages of the project, thereby negatively affecting his/her work-life balance. Thus:
H7: IT workers involved in GSD projects with fluctuating requirements will experience higher work-life conflict.

Extent of Synchronous Communication Required in the Project and Work-Life Conflict

Any ISD project requires intense and frequent interactions with clients and other team members (e.g., Nidumolu 1995). Often this interaction comes in the form of synchronous communication, where the IT worker is required to answer immediate questions (or provide clarifications) to remote members, and enable "convergence" on issues with immediacy (Dennis and Valacich 1999). Messersmith (2007) further argues that in the current age, most ISD workers are expected to carry mobile phones, PDA, laptops at all times such that they are available "anytime, anywhere." Such demands usually put tremendous strain-based conflict for the IT worker (Messersmith 2007). This is even greater for GSD where due to time zone differences, coordination meetings occur at "odd times," disrupting the physiological and social rhythms of IS professionals (Sarker and Sahay 2004).
H8: IT workers involved in GSD who engage in higher levels of synchronous communication with their remote members will experience higher work-life conflict.

Agile Methodologies and Work-Life Conflict

Agile methodologies that emphasize short iterative cycles of development, collaborative decision-making, and rapid feedback and change (Nerur et al. 2005), are increasingly being adopted in the offshore environment (e.g., Henderson-Sellers and Serour 2005). Fowler (2003) argues that agile methods work "best with close communication and open culture," both of which are difficult in an GSD context, and warns "agilists" who are involved in offshore projects that they are likely to "feel the pain much more" than when using more traditional methods. Other aspects of agile methods) such as daily meetings, maintenance of charts that track progress on a daily basis, close communication with clients, etc. can be extremely burdensome for the IT worker in a distributed setting (e.g., Erickson, Lyytinen, and Siau 2005), and likely to increase his/her WLC.

H9: IT workers involved in GSD who use agile methodologies will experience higher work-life conflict.

Distributed Work Characteristics-related Antecedents

Time Zone Overlaps with Remote Colleagues and Work-Life Conflict

According to Gambles et al. (2006, p. 47-48), while today's technology enables telework across time and place, it "often results in people working longer and at a faster pace;" this is especially true when "people work across time zones." In such cases, they "often feel that they have to be constantly available" (Gambles et al. 2006, p. 48). Sometimes, individuals, especially those involved in projects with significant offshore component, may have to work late into evenings to coordinate tasks with (or clarify issues for) geographically remote colleagues. These colleagues may be in time zones which have little or no overlap with the work hours of that individual, thereby negatively affecting each team member's work-life balance.

H10: IT workers involved in GSD who have little or no time overlaps with remote colleagues will experience higher work-life conflict.

Number of Distributed Locations and Work-Life Conflict

As the number of distributed locations in which an individual's team members are located increases, the coordination of tasks, complexities associated with the transition of work from one place to another also increases (e.g., Sarker and Sahay 2004). Such problems results in much more strain as well as involvement on the part of the IT worker to ensure that things work smoothly (e.g., Oshri et al. 2008), thus resulting in greater work-life conflict.

H11: IT workers involved in GSD project teams where members are distributed across higher number of locations will experience higher work-life conflict.

Distributed Team Size and Work-Life Conflict

The size of a distributed ISD team has been argued to have important implications for the team dynamics in general, and for the individual team members in particular (Espinosa et al. 2007). As the size of the team increases, the extent of coordination required to keep the team productive and high-performing also increases (e.g., Espinosa et al. 2000). This may have a significant effect on the individual members, who now have to put in extra effort to ensure proper coordination and communication in the team (e.g., Oshri et al. 2008), which can in turn raise WLC.

H12: IT workers involved in GSD within large teams will experience higher work-life conflict.

Effect of Work-life Conflict on Job-related Outcomes

Past empirical studies show that WLC has significant implications for employees' productivity/performance and organizational commitment. Organizational commitment may be defined as the "willingness of …actors to give their energy and loyalty" to the organization, or "an affective attachment to an organization apart from the purely instrumental worth of the relationship" (Angle and Perry 1981, p. 1). Aryee et al. (2005, p. 135) argue that individuals who experience higher conflicts between their work and family domains "will perceive their organizations as unsupportive and will therefore not feel obligated to reciprocate with commitment." We expect a similar type of a relationship in the context of IT workers involved in GSD.

H13: Higher work-life conflict of IT workers involved in GSD will lead to lower levels of their organizational commitment.

The negative effect of WLC on the productivity of employees has also been empirically established in prior human resource literature (e.g., Netemeyer et al. 2004; Felstead et al. 2002). Employees who experience work-life conflict are likely to be continuously stressed owing to their inability to balance the demands of their family and their work. In the case of IT professional, this pattern would be even more applicable. The demands of the IT profession are such that stress is likely to reduce one's motivation and one's ability to concentrate, resulting in lower performance.

H14: Higher work-life conflict of IT workers involved in GSD will lead to lower levels of performance

Finally, prior human resource literature has also argued for a strong linkage between one's performance and organizational commitment (e.g., Lau and Moser 2008). Individuals who have higher performance ratings/evaluations are more satisfied with their organization and are more committed to it (Lau and Moser 2008).
H15: Higher performance of IT workers involved in GSD will lead to higher organizational commitment.

We summarize our model in Figure 1.

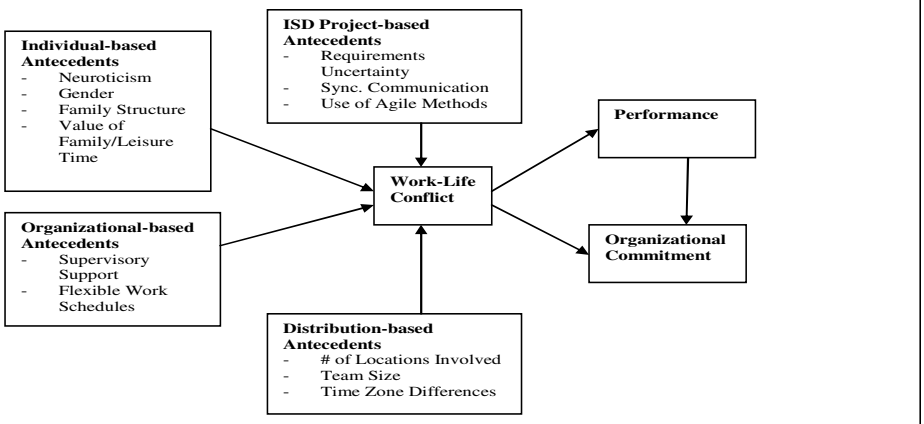

Figure 1: Research Model

Research Methodology

To test our model described above, we gathered data using online forms distributed through e-mail. All of the respondents are IT professionals engaged in GSD initiatives from India. The respondents represent a variety of organizations ranging from well-known companies such as Accenture, Deloitte, Pricewaterhouse Coopers, Cognizant, Tata Consultancy Services, and HP to less known companies. Their distributed members were located in Asia (e.g., Dacca, Singapore,), Europe (e.g., London, Copenhagen,), and North America (Mexico city, and several cities in Canada, and the USA). The useable sample size (after deleting incomplete surveys) was 110. Among the 110, 22 respondents were less than 25 years of age, while 88 were between 25 and 55 years. 64 respondents had a masters degree (or more) while 44 had only a bachelors degree. More than half of the respondents had 5 or less years of experience within the IT industry, with about 40 respondents playing a technical role in their current position, and others playing a more non-technical role.

Measures

We used established instruments (where possible) for measuring our constructs. Our primary construct, *work-life conflict* was measured using eight items adapted from Kopelman, Greenhaus, and Connelly (1983). Among the individual-level variables, *neuroticism* was measured using the Big Five Personality Scale's eight neuroticism items; *gender* and *family* structure were measured using single items that capture respondent's gender, and the number of dependents they had. *Value of family/leisure time* was measured using two items that captured (on a scale of 1 to 7, where 1 referred to "Not at all" and 7 referred to "To a great extent") the extent to which family and leisure time was important to the respondent. *Supervisory support* was assessed using Thomas and Ganster's (1995) nine-item scale, and *flexible work arrangements* was measured using three adapted items from Greenhaus et al. (1989). Nidumolu's (1995) three items were used for measuring *requirements uncertainty*. The *level of synchronous communication required* in the project was assessed by a single item that captured the extent of synchronous communication required in the project. The use of *agile methodologies* in the project was assessed by the following item: On a scale of 1 (Not at all) to 7 (To a great Extent), indicate the extent to which agile methodologies was used in the systems development projects undertaken by your (globally) distributed team(s). Respondents were asked to provide the largest *time difference* they had with their remote colleagues. From this information, a categorical variable was created that captured the time difference with remote colleagues (e.g., 9 hrs or more was coded as 3, time difference of 4 to 8 hours as 2, and a time difference of 3 or less hours was coded as 1). The *number of locations* in which one's remote colleagues are located, and the *size of the team* were assessed using single items. *Organizational commitment* was measured using nine items taken from Mowday, Steers, and

Porter (1979). Drawing on Dubinsky and Mattson (1979), *performance* was measured using two self-reported items (self-rating, and supervisor's rating of performance).

Analysis and Preliminary Results

In analyzing our data, we adopted the partial least squares (PLS) approach, and used the statistical tool PLS Graph 3.0. The PLS approach is especially useful in the context of small to medium sample sizes. . Further, given the small sample size in our study, *we tested the effects of variables within each of the broader categories of variables* (e.g., individual characteristics-related, organizational characteristics-related) *separately*. This approach also allowed us to assess the relative explanatory power of each of the categories of variables. We provide the reliabilities of the multi-item measures in Table 1 and summary of our results in Table 2.

Neuroticism, time commitment to family and leisure, and gender had significant effects on WLC, while *family structure* did not have any effect. However, *the effect of gender was opposite to the one hypothesized*, with males exhibiting higher work-life conflict. This is not entirely inconsistent with prior research, which often argues that "women have been socialized over the generations to the nurturing role of the family. No matter how achievement orientated the women is," she is able to balance these two domains more easily (Gambles et al. 2006, p. 77). In terms of the project level variables, both *requirement fluctuations/uncertainty* and *extent of required synchronous communication* increased work-life conflict, though the effect of agile methods was not significant. In the organizational characteristics model, *supervisory support* (at $p < .10$) and *flexible work arrangements* affected WLC. However, the results indicated that more flexible work arrangements led to higher WLC. This is contrary to what was hypothesized. While this relationships needs to be tested in future studies, one possible reason for the positive effect of flexible work arrangements on WLC may be the fact that flexible work schedules cause more spillovers from the work domain to family domain for an individual and could thus result in higher conflict (Guest 2002). In terms of the distributed characteristics, *time zone differences* and *team size* (at $p < .10$) significantly affected WLC, though the effect of team-size was in the opposite direction. The negative effect of team-size could be due to the fact that in larger teams more members are available to share the work load, thereby reducing the pressure on individual members, and thus decreasing their WLC. Number of locations did not have any significant effects. Finally, as hypothesized, *work-life conflict had a negative effect on organizational commitment* ($p < .10$), though its effect on performance was not found to be significant. However, as hypothesized, performance had a significant effect on organizational commitment. Finally, by comparing the R-squares (Venkatesh, Morris, Davis, and Davis 2003), we found that individual-based variables have the most effect on WLC.

Table 1: Composite Reliabilities of the Multi-item Measures

Construct	**Composite Reliability**
Neuroticism[1]	.828
Time Commitment	.731
Supervisory Support	.950
Flexible Work Schedules	.856
Requirements Uncertainty	.759
Work-Life Conflict	.940
Organizational Commitment	.936
Job Performance	.806

[1] Four items for neuroticism were removed for this analysis due to poor psychometric properties.

Table 2: Summary of Results				
Category of Variables	Selected Variables and their effect on Work-Life Conflict	Effect of a Category of Variables on Work-Life Conflict	Effect on Org. Commitment	Effect on Performance
Individual-based	Neuroticism (+); b= .279; p< .05	R-Square explained is .196 (Highest Effect)	NA	NA
	Gender (Males +); b= -.154; p< .05			
	Family (+); b= .020; p< .05			
	Time Commitment (+); b= .320; p< .01			
Organizational-based	Supervisory Support (-); b= .267; p< .10	R-Square explained is .140	NA	NA
	Flexible schedule (-); b= .372; p< .01 but more flexible schedules led to higher WLC			
ISD Project-based	Req. Uncertainty (+); b= .241; p < .01	R-Square explained is .182	NA	NA
	Sync. Com. (+); b= .346; p < .01			
	Agile Meth. (+); b= -.074; p> .10			
Team/ Distribution-based	# of Locations (+); b= .351; p> .10	R-Square explained is .121	NA	NA
	Team Size (+); b= -.132; p< .10			
	Time zone difference (+); b= .110; p< .01			
Work-Life Conflict (-)		NA	b= -.274; p< .10; R-Square is .032	b= -.029; p> .10; R-Square is .014
Performance (+)		NA	b= .330; p< .01; R-Square= .157	NA

Conclusion and Future Plans

In this preliminary study, we examined the antecedents of work-life conflict (WLC) of Indian IT workers engaged in GSD. While WLC has been viewed as an important concern for human resources in all contemporary organizations, it is particularly critical in the GSD context, where, to our knowledge, it has not been empirically investigated.

Past research in allied/reference disciplines (e.g., management, psychology, and sociology) have examined work-life imbalance in traditional organizational settings, focusing on individual-based and organizational-based variables. However, our study does not limit itself to utilizing these generic variables only, but also investigates the effect *of ISD project-based variables*, and *distribution-based variables*, *thereby making this work more relevant to the IS discipline and to GSD in particular. Apart from identifying significant determinants of WLC,* the analysis of the broad categories of variables enabled us to present a preliminary assessment regarding which categories of variables have the most effect (please see Table 2). Future research will also examine whether the nature of work performed by the IT workers (that is, technical versus non-technical) and their years of experience in working in the distributed mode has any effect on their WLC.

In this manuscript, we present results from our study involving GSD professionals based in India. While India-based GSD professionals have been recognized as valuable resource in many organizations across the globe, and thus, need to be studied, it is also important to study perceptions of WLC of GSD professionals from other countries (in the developing as well as developed world), given that GSD is a global phenomenon, and WLC has been seen to be culture dependent (Aryee et al. 2005). In an effort to understand the cultural differences, we are in the process of collecting data from GSD professionals based in the US and Europe.

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