Elucidating the work-family conflict among Indonesian lecturers in the period of education reform

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Abstract: While the Indonesian government is providing more activities to the development of lecturers in the period of educational reform, the study indicates the existence of perceived pressures derived from the incompatibility to balance work and family requested roles. This study examines the sources and outcomes of the work-family conflict among Indonesian lecturers in the reform period. Partial least squares (PLS) analysis was used to examine the proposed hypotheses. The findings in the sources show that work and family demands positively influence the work-family conflict, with the higher effect of family demand on the work-family conflict than that of work demand. The results of the outcomes reveal that job and family satisfactions mediate the negative relationship between the work-family conflict and life satisfaction. The findings work as a management alert for the Indonesian government and higher education institutions to evaluate the application of education reform in Indonesia through managing the work-family conflict among the lecturers.

Keywords: educational management; Indonesia; lecturers; satisfaction; work-family conflict.

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1 Introduction

Indonesia is a developing country with growing economy and rapid development activities in many sequential sectors. One of the development movements is in the educational sector which has received much attention since 2009. The government of the Republic of Indonesia has intentionally increased the national education budget by 20% to develop a well-managed educational system. The government launched the 2010–2014 national policy on education development aimed at producing qualified Indonesian human resources. One of the top five priorities in the declared educational development includes increasing the quality of lecturers (Directorate General of Higher Education in Indonesia, 2012). As a future agent of economic development, the National Education Policy 2015–2019 focuses on strengthening the lecturer’s role into that of an agent who is responsible for fortifying the influence of culture, knowledge and technology in education (Directorate General of Higher Education in Indonesia, 2015). Within a broad vision that education is central to national development (McGrath, 2010), the increase of the quality of the lecturers is crucial to the preparation and sustainability of the quality teaching force necessary for educational reform (Tang, 2011).

The Indonesian government encourages lecturers to improve their professionalism by providing more developmental activities and increasing remuneration to those certified. In addition to those activities, the government also demands that the lecturers be involved in high pressure work activities (e.g., taking higher education, upgrading knowledge using various trainings and being assessed by more evaluation indicators). Indeed, Indonesian lecturers are laden with more work pressures to become professional educators in this period.

Lecturers face higher demands in their roles within working domain, where each of them is an employee who deals with work and family roles interdependently. Frone, Russell and Cooper (1992) stated that work and family represented two of the most central realms of adult life, each offering a unique vantage point to investigate the important aspects of human behaviour. In this reform period, a lecturer is more challenged to balance the tug of pressures between work and family demands in order to achieve high performance. The involvement of the lecturers in the activities demanded by the government increases pressures derived from workload, time and problems related to role fulfilment. Meanwhile, the lecturers also need to get involved in their family domain with pressures derived from marital roles and as parents of young child/children. This inter-role conflict is considered as inevitable when a lecturer is requested to fulfill higher demands at work while also fulfilling greater family demands; this situation may further be exacerbated due to the limitations of time, psychological capability and physical ability.

The growing body of research on stress regarding the relationship between work and family has suggested that work and family are interconnected, causing a reciprocal influence on one another (Aryee, Fields and Luk, 1999; Frone, Russell and Cooper, 1997; Greenhaus and Beutell, 1985). Work and family domains are considered as an employee’s most important domains, and the activities within these domains generally take up more time and energy than most of the other roles (Frone, Russell and Cooper, 1992; Rane and McBride, 2000; Wadsworth and Owens, 2007). The challenges associated with managing work and family roles have been studied under the rubric of the work-family conflict (Greenhaus and Beutell, 1985). Previous studies found that the work-family conflict decreases employees’ performance while increasing depression and
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physical health problems (Frone, Russell and Cooper, 1997); furthermore, job dissatisfaction and non-job dissatisfaction have also been found to increase (Frone, Russell and Cooper, 1992; Kinnunen, Geurts and Mauno, 2004; Martins, Eddleston and Veiga, 2002). The interest in the work-family conflict within education field has also been shown (e.g., Cinamon, Rich and Westman, 2007; Panatik et al., 2011); however, the study among the lecturers during the Indonesian education reform is still under-represented in the research literature at present.

The purpose of this research is to elucidate the work-family conflict among Indonesian lecturers by empirically examining its sources and outcomes as applicable in the current period of Indonesian education reform. The influences of work and family demands are studied as the sources of conflict. Moreover, the study examines the magnitude of the effect between these sources to determine the priority while managing the sources’ effects towards the conflict. Frone, Russell and Cooper (1992) stated that studying the sources of the work-family conflict increased the likelihood of managing conflict with limited organisational resources. This study assesses the satisfaction constructs as the outcomes by including job, family and life satisfactions. Job satisfaction and family satisfaction are posited as mediating variables in the negative relation between work-family conflict and life satisfaction. The previous studies have examined the mediating variables with mixed results of indirect effects through job or family satisfaction, direct effects only and both indirect and direct effects (Aryee, Fields and Luk, 1999; Bedeian, Burke and Moffett, 1988; Coverman, 1989; Frone, Russell and Cooper, 1997; Kopelman, Greenhaus and Connolly, 1983). By focussing on the mediating effects and by shedding additional light on the supported mechanism (whether direct, mediated or partially mediated), the findings of this study contribute theoretically to the field. Practically, the findings contribute by working as a management alert to evaluate the Indonesia education reform through managing the work-family conflict. Moreover, this study also provides insights for the educational administrators in other countries with cultural similarity in managing conflict during the period of educational development.

2 Literature review and hypotheses development

2.1 Indonesian education reform

The Indonesian education reforms emerged from the national political reform in 1998 when Law No. 22/1999 on Regional Autonomy was established. A radical political movement towards decentralisation triggered the real transformation with the concept of decentralisation in Indonesia. The implementation of decentralised system in education is considered as a milestone to develop and better the quality of national education (Bandur, 2013).

One of the movements in education reform is the government approval of Law No. 14/2005 on the Management of Teachers and Lecturers, followed by Government Regulation No. 37/2009 on the Management of Lecturers. These policies were intended to develop a well-managed educational system, especially by improving the quality of Indonesian lecturers by managing their working environment. The regulation defined a lecturer as a professional employee and scholar who is responsible for transforming,
developing and elaborating knowledge, technology and culture through education, research and social empowerment (Government Regulation No. 37/2009). The core tasks of the Indonesian lecturers, Tridarma, consist of teaching, doing research and conducting community service. Practically, Indonesia defines lecturer as a university teacher, qualified under master and/or doctorate degree, working in a higher education institution in Indonesia.

The government has increased the national educational budget by 20% since 2009. Accordingly, it launched the 2010–2014 National Policy on Educational Development which includes the increasing quality of lecturers as one of the five top priorities in educational development (Directorate General of Higher Education in Indonesia, 2012). Currently, the National Education Policy 2015–2019 focusses on strengthening the lecturer’s role into that of an agent of culture, knowledge and technology development (Directorate General of Higher Education in Indonesia, 2015). The continuous movements have shown the government commitment to increase the lecturers’ quality as a valuable human resource asset in the Indonesian educational system.

2.2 Work demand and family demand

Yang et al. (2000) defined different types of sources of pressure. First, the individual objective environment which is defined as the expectations of pressure sent to a focal person by members of his or her role set. Second, the individual subjective psychological environment defined as the objective pressure perceived by a focal person that affects his or her role performance. Another type of pressure may originate within an individual known as ‘own forces.’ Based on these multiple pressure sources, Yang et al. (2000) defined demand in terms of role performers’ perceptions and feelings of pressure. Thus, as suggested by Frone, Russell and Cooper, (1992), work demand refers primarily to role performers’ perceptions and feelings of pressure aroused from hours worked, excessive workloads, role conflict, role overload and role ambiguity. Meanwhile, as suggested by Kessler (1985) and Frone, Russell and Cooper (1992), family demand refers primarily to role performers’ perceptions and feelings of pressure derived from marital and parental roles of having young child/children.

2.3 Work-family conflict

Work-family conflict is a form of inter-role conflict in which the role pressures from the domains of work and family are mutually incompatible in some respects (Greenhaus and Beutell, 1985). The participation in the work (family) role is made more difficult by virtue of the participation in the family (work) domain. The involvement in one domain will decrease a subject’s participation in another domain. The definition of the work-family conflict used here specifies the existence of mutually incompatible role pressures. No causal direction of role interference is implied in this definition.

Greenhaus and Beutell (1985) defined three major forms of work-family conflict: time-based conflict, strain-based conflict and behaviour-based conflict. Multiple roles may compete for a person’s time. Time spent on the activities within one role cannot generally be devoted to the activities within another role. Thus, a lecturer’s tight working schedules devoted to lecturing, researching, staying involved in community empowerment programs and participating in developmental activities may result in time-based conflict if s/he also has to take care of her/his family. Strain-based conflict exists
Elucidating the work-family conflict when strain in one role affects one’s performance in another role. The roles are incompatible in the sense that the strain created by one makes it difficult to comply with the demands of another. A lecturer may encounter a high-level work strain because of his/her involvement in many developmental activities which will then decrease his/her performance in fulfilling his/her roles in the family domain. Behaviour-based conflict refers to in-role behaviour that may be incompatible with the expectations regarding behaviour in another role. For example, a lecturer may be unable to adjust his/her behaviour of being objective and aggressive in class and being subjective and warm at home with his/her family.

In the discussion of the work-family conflict and its sources, Lazarova, Westman and Shaffer (2010) noted that spill-over approach consists of a process that affects attitudes and behaviour in which demands carried over from one role to another for the same individuals arouses conflict for those who are unable to balance these demands. Based on the interference approach (Kelly and Voydanoff, 1985), conflicting demands make it difficult to fulfil the requirements of multiple roles. It would appear that tight working hours interfere with the amount of time a worker can spend with family and accomplish household tasks or parental or spousal responsibilities. In contrast, a higher family demand derived from the activities necessary to fulfil the required parental and marital roles makes it difficult to participate in work domain. Thus, it is proposed that work demand and family demand are positively related to the work-family conflict, as especially pronounced in the context of Indonesian lecturers.

In the period of education reform, Indonesian lecturers have encountered higher work demands due to their core responsibilities (teaching, doing research and conducting community service, referred to as Tridarma) and activities to develop their professionalism more than ever. It is a fact that Tridarma responsibilities create excessive workloads that often occupy more working hours than expected. Lack of job description triggers role ambiguity and lack of autonomy which increase work pressures among the lecturers. Moreover, while the government demands the lecturers to take further degrees by providing various scholarships, the management of the scholarships has not yet been well-established. Besides, some trainings and developments are assigned based on the institutional representativeness and may not be suitable with personal mastery. The discretionary effort from an individual to take the challenge in these developmental activities is not devoted because a lecturer has been fully occupied by his/her core responsibilities as well as by his/her administrative jobs. Moreover, the application of more performance indicators also takes more efforts to prepare. These conditions increase the level of the perceived work demands, either objectively or subjectively, that spill over into the family domain and arouse conflict for the lecturer who is unable to balance these demands. In a different context, the previous studies have found a positive relationship between work demands and work-family conflict (Aryee, 1993; Greenhaus et al., 1989).

In order to examine the relation applied in the Indonesia lecturer context, the following hypothesis is proposed:

\[ H1a: \text{Work demand is positively related to work-family conflict.} \]

A lecturer who is married, has young child/children, and lives with his/her spouse and child/children is exposed to higher family demand in this period. Young child/children need high parental involvement in taking care of their daily life (Greenhaus and Beutell, 1985; Greenhaus and Parasuraman, 1986; Parasuraman and Simmers, 2001). Meanwhile, school/college-aged child/children need to cope with new academic standards in
education. The reform period requires school/college institutions to fulfil higher standards in education quality. The National Final Exam (Ujian Akhir Nasional) for school and National Accreditation for college have demanded more efforts from academic institutions and students to perform. Accordingly, a lecturer who has child/children of school/college age ought to provide more guidance for his/her child/children to pass the educational phases. Therefore, the lecturer ought to cooperate with his/her spouse and other family members to deal with the higher parental pressure in addition to the marital pressure. The lack of family support in the wake of education reform will create a higher family demand. The allocated resources to fulfil the parental and marital roles and other stressors in his/her family will spill over into the work domain and hamper the effort to fulfil the requested roles of a lecturer’s work demand, referred to as inter-role conflict. Within a limited number of researchers applied in Indonesia lecturer context, the empirical examinations in different contexts have found that family demand is positively related to work-family conflict (Carlson, 2000; Greenhaus and Beutell, 1985; Yang et al., 2000). With the purpose of exploring the relationship in Indonesian lecturer context, this study develops the following hypothesis:

H1b: Family demand is positively related to work-family conflict.

Work and family demands reflect social objective expectations and self-subjective expectations and are the most susceptible to values, beliefs and role-related self-conceptions internalised through socialisation (Greenhaus and Beutell, 1985). Demand is greater from the domain with a higher priority based on the individual social norms and conceptions. Yang et al. (2002) proposed the rationales to support this priority-demand link. First, for the rationale based on self-subjective sender expectation, a person becomes more ego-involved and invests more time and energy in the high-priority domain. Second, the domain on which the role is set, and the society at large, exerts a higher priority on the objective role pressure through social expectations and norms. Last, based on those two mechanisms, a focal person will be more responsive to the role demands from the domain with the higher priority.

The discussion above proposes a priority-demand link based on culture to explain the magnitude of relationships between sources and work-family conflict. Culture is defined as the collective programming of mind (Hofstede, 2001). Culture has empirically been determined as a factor that influences work-family conflict because its sources, the domains’ pressures, reflect social expectations and self-expectations internalised through socialisation (Greenhaus and Beutell, 1985). One of Hofstede’s (2001) cultural dimensions, collectivism-individualism, has been determined as an important factor in explaining work-family conflict (Yang et al., 2000).

Individualism pertains to societies in which the ties between individuals are loose; this means everyone is expected to look after him or herself and his or her immediate family. Collectivism is the opposite, pertaining to societies in which people from birth onwards are integrated into a strong and cohesive group and who, throughout each person’s lifetime, continue to protect and be protected by this group in exchange for unquestioning loyalty. Hofstede (2001) stated that individualist society valued family and personal time more than collectivist society. When there is a conflict of interest, individualists tend to put their self-interest towards family above the collectivist interests.

Indonesian society values collectivism more than individualism. They put communalism and harmony as their major concerns of living. Pawitra (1993) found that, in the Indonesian context, work is considered as an effort to maintain communalism
through sustaining living of the next generations. The fulfilment of one’s work responsibility will maintain group cohesiveness which is integrated into the individual living with collectivist values. Indonesian employees perceive work as important primarily because it is instrumental for a family’s economic well-being. It would not be surprising, then, if Indonesian people dedicate more time and energy during work to meet social expectation and norms. Therefore, in the period of education reform, Indonesian lecturers with their priority on working will tend to prioritise the fulfilment of work demand by getting involved in many high pressure activities (e.g., taking higher education, increasing knowledge through various trainings and dealing with more assessable evaluations) in order to cope with their social required norms.

In this study, we expect that both work demand and family demand have positive and significant effects on work-family conflict. However, despite the positive effect of family demand, it is likely that Indonesian lecturers might place work in a higher priority than family. Thus, the following hypothesis is proposed:

\[ H1c: \text{The magnitude of the relationship between work demand and work-family conflict is higher than that between family demand and work-family conflict.} \]

2.4 Job satisfaction, family satisfaction and life satisfaction

The outcomes of work-family conflict in this study are examined using job satisfaction, family satisfaction and life satisfaction. Job satisfaction refers to the affective reactions to one’s job (Parasuraman and Simmers, 2001). Family satisfaction assesses the extent to which individuals feel positive about their family situation (Parasuraman and Simmers, 2001). Life satisfaction is defined as the degree to which individuals judge the quality of their lives favourably and, therefore, synonymous with subjective well-being (Diener, 1984).

A discussion in this outcome’s context of work-family conflict found inconsistency in the supported relationships of job/family satisfaction as mediating variable in the relation of work-family conflict and life satisfaction. Previous studies have intended to examine the mediating variables with mixed results in findings, indirect effects through job or family satisfaction (fully mediated), direct effects only and both indirect and direct effects (partially mediated) (Aryee, Fields and Luk, 1999; Bedeian, Burke and Moffett, 1988; Coverman, 1989; Frone, Russell and Cooper, 1997; Kopelman, Greenhaus and Connolly, 1983). This study focusses on the mediating effect as a contribution to the field by shedding additional light on the supported mechanism.

This study hypothesises that job satisfaction and family satisfaction mediate the relationship between work-family conflict and life satisfaction. These hypotheses are derived from the additive models of overall quality of life (Aryee, Fields and Luk, 1999; Bedeian, Burke and Moffett, 1988; Higgins, Duxbury and Irving, 1992; Kopelman, Greenhaus and Connolly, 1983). The additive models propose that the perceived quality of life associated with each constituent domain of life (e.g., work and family) combines additively to determine overall quality of life. In general, work and family constitute the backbone of human existence (Howard, 1992), and therefore, positive satisfaction levels in these domains must, regardless of cultural differences, contribute to an individual life satisfaction.

Work-family conflict influences life satisfaction (Arora, Hartman and Stoner, 1990; Aryee, 1992). Within the mechanism, job satisfaction mediates the relationship between
work-family conflict and life satisfaction. An individual lecturer who faces a high inter-role conflict from his/her work and family demands tends to feel lower job satisfaction and thus lower life satisfaction. The higher an individual’s involvement in job, the better her/his performance. In this situation, the individual ‘leaves’ his/her family at the same time that causes work-family conflict (Adams, King and King, 1996). The increasing of work-family conflict will negatively influence perceived job satisfaction. The lecturer who is overloaded and lacks the ability to balance work-family pressures will feel stressed. This negative stress influences his/her passions and efforts to work, and thus decreases his/her affective evaluation on the job. The pressures to deal with the conflict decrease the perceived good attitude towards job since the lecturer is feeling uncomfortable handling it. Working is not as enjoyable as before since s/he is pressured to handle family pressures while facing tight work pressures at job. The lecturer is forced to juggle work and family pressures while working in a highly demanding condition. This pressured and uncomfortable conditions decrease the affection towards the job. The expectations towards the job may not be achieved because of the stressful feeling. As a consequence, the decreasing of job satisfaction positively influences life satisfaction (Rice, Near and Hunt, 1980). When the affection towards job decreases, s/he feels lower satisfaction at job. Since working is one of the major domains in life, the decreasing will positively influence the lecturer’s satisfaction towards life. Job satisfaction does a meaningful contribution to individual life satisfaction (Howard, 1992). Therefore, this study hypothesises that:

\[ H2a: \text{Job satisfaction mediates the relationship between work-family conflict and life satisfaction.} \]

In the family domain, an individual lecturer who faces high level of work-family conflict tends to feel lower family satisfaction and thus lower life satisfaction. Arora, Hartman and Stoner (1990) and Aryee (1992) found that an individual experiencing work-family conflict tends to have low marital/family satisfaction. The inter-role conflict has forced the lecturer to deal with work pressures while doing activities to fulfil his/her family roles. This exhausted feeling of stress decreases the affection evaluation towards family. Dealing with family concern’s activities is not as comfortable as before because of its high pressures. Some achievements and reward expectations may not be fulfilled as the consequences of the stressful condition. The feeling of pressure based on the lack of ability to balance work-family demands is an ultimate source of the decreasing of family satisfaction. Consequentially, the low level of family satisfaction will decrease the level of life satisfaction (Rice, Near and Hunt, 1980). Family is equally positioned with work and stands parallel to it (Howard, 1992). This mechanism leads to the following hypothesis:

\[ H2b: \text{Family satisfaction mediates the relationship between work-family conflict and life satisfaction.} \]

Figure 1 shows the hypotheses in the developed research model.
3 Method

The respondents of this study were Indonesian married-lecturers having young child/children (less than 25 years old) and living with their spouse and child/children. An online-survey (a website-questionnaire) was administered through various communication networks such as mailing lists and social network sites. A total of 278 respondents accessed the survey site with 134 respondents (48.20%) having completed the entire questionnaire, hence, the responses of these 134 respondents were considered valid for further analysis.

The criteria necessary for the participants were that they be married, having young child/children (less than 25 years old), and living with their spouse and child/children. The vast majority of the respondents were between 25 to 45 years old (82%) and male (66%). Based on their educational backgrounds, most of the respondents held masters degrees (67%), and the rest held doctorates (28%) and bachelor degrees (5%). Most of them had working spouses (72%). The average of tenure was 12.15 years. Additionally, the average of number of children was two and within the age of 9.

The questionnaire consisted of demographic questions (i.e., age, gender, tenure, number of children) and questions on the examined variables. All questions related to the variables were measured on a seven-point Likert scale (1 = strongly disagree to 7 = strongly agree). Negatively worded questions were applied in some situations. The English-Indonesian back translation by two independent bilingual individuals was conducted to ensure the equivalency of meaning.

Work demand was measured by eight items adapted from the previous literature (Kahn et al., 1964; Rizzo, House, and Lirtzman, 1970; Seashore et al., 1982; Adams, 2001; Fu and Shaffer, 2001) and related to time pressure, role conflict, role overload and role ambiguity (e.g., I do not make my own schedule; I receive the expected roles from lots of senders; I am overloaded with the expected roles in my job). Family demand was measured by four items adapted from Kim and Ling (2001) (e.g., my family does not support my working activities; my spouse does not provide any help to take care of the family; my spouse does not support me in taking care of the children). Ten items to measure work-family conflict were adapted from Carlson and Kacmar (2000) (e.g., my work responsibilities take too much time from family devotion; I feel tired and exhausted...
when taking on my roles for work and family; my family responsibilities interfere with my work responsibilities). Five items to measure job satisfaction (e.g., I am satisfied with my job; I am satisfied with my leader; I am satisfied with the management) and five items to measure family satisfaction (e.g., I am satisfied with my family; I am satisfied with the communication between my family members; I am satisfied with the method of understanding within my family) were adapted from measures developed by Taylor and Bowers (1972). To measure life satisfaction, four items from the satisfaction with life scale developed by Diener et al. (1985) were used (e.g., I am satisfied with my life; I have a very good life; I have an ideal life).

The common method bias test was conducted to test the tendency of common rater effects (Podsakoff et al., 2003). Harman’s single-factor test using exploratory factor analysis was applied (Podsakoff et al., 2003). The partial least squares (PLS) analysis was used to test the proposed model. PLS is a type of causal modelling and was developed as an alternative to covariance-based methods. It uses regression-based calculation methods instead of the maximum likelihood estimation methods used in structural equation modelling (SEM) analysis. PLS methods require fewer data assumption (especially multivariate normality assumption) and provide more accurate coefficient results with smaller sample sizes than SEMs.

The PLS methods facilitate researchers to develop complex models with latent variable relationship. Latent variables are constructs that cannot be directly measured, but must be analysed through indirect means. The latent variable estimations can then be used to analyse the relationships between various hypothesised constructs. These relationships can be fairly straightforward (with direct or one-way relationship) or be much more complex (with moderated, mediated or reciprocal relationship). The PLS can test complex models with multiple independent and dependent variables and when particular relationships (paths) are proposed that cannot be easily tested by standard regression analysis. Additionally, PLS offers tests for determining overall model adequacy and provides information on the relationship strength between various constructs. Such abilities make PLS a powerful analysis tool.

The PLS has no single generally agreed-upon measure of overall model adequacy. There are multiple model tests that must be examined to determine model adequacy. Once model adequacy has been determined, the significance of the links between the latent variables can be tested, and test can be conducted on how well the manifest variables (variables that are directly assessed and are used to estimate latent variables) measure the latent variables.

A standard analytic PLS model adequacy measure provides two versions of scale reliability: a composite reliability measure and a Cronbach’s alpha measure. The composite reliability measure is useful because it relaxes the (often unrealistic) Cronbach’s alpha assumption that all scale items have the same relationship to the attendant latent variable. The composite measure, instead, uses the manifest variable’s observed relationship with its associated latent variable to weigh the calculations in determining the reliability. Such a method gives a reliability score that is equivalent to Cronbach’s alpha if all items are equally related to a latent variable and gives a more accurate reliability measure if this assumption is violated. Cronbach’s alpha and composite reliability must both be higher than 0.70 for reliable scales (Chin, 1998).

The next examination in model adequacy measure is average variance extracted (AVE) score. The AVE provides evidence if a set of manifest variables from a given measure is a reasonable representation of the underlying latent construct. The more
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variance that can be extracted by PLS, the greater confidence there ought to be that the manifest variables are measuring a common latent variable. When the AVE score is greater than 0.50 (on a 0–1.00 scale), there is a reasonable amount of confidence that the manifest variables are adequate in measuring the latent variable. Comparison of AVE score to square of correlation score was used to gauge discriminant validity (AVE > Correlation²).

Item cross-loadings must also be examined in addition to AVE assessment. Cross-loadings are similar to factor analysis and factor scores. The scores give information on how a given manifest variable relates to all latent constructs. Items that are empirically distinct will have highest loadings on their associated latent constructs and will have low loadings on all other constructs. In order to be considered to have appropriate cross-loadings, an item must load at least 0.5 on the intended construct (Chin, 1998).

Additionally, PLS provides a measure of how the model can be used for predictive purposes with $Q^2$ measure. The $Q^2$ measure helps determine how generalisable the model is across future samples by using a jackknifing procedure. To calculate this measure, the PLS algorithm successfully removes portions of the original data, and then reanalyses the model using the remaining data. Higher $Q^2$ scores indicate better model predictive properties, and thus greater generalisability. A positive score indicates that the model has appropriate predictive ability. A negative score indicates that the model does not have good predictive properties, and its generalisability must be doubted.

Once model adequacy has been established, the model result must be examined to determine the strengths of the relationships between the latent variables. First, the path between the latent variables ought to be tested for significance and to check if the coefficient signs are in the predicted direction. Additionally, PLS also provides information on how much variance a set of exogenous variables explains for its attendant endogenous variables. This information is given through associated $R^2$ measure for the latent variables.

4 Results

Harman’s single-factor analysis was applied for the analysis of common method bias. The principal component analysis with varimax rotation revealed the presence of 10 distinct factors with eigenvalue greater than 1 instead of a single factor. Furthermore, the 10 factors altogether accounted for 61.1% of the total variance with the first (largest) factor not accounting for the majority of the variance (29.2%). The findings show that common method bias does not exist.

All scales demonstrated good reliability levels. Cronbach’s alpha and composite reliability scores of all variables were higher than 0.70; work demand (0.96; 0.97, respectively); family demand (0.86; 0.91, respectively); work-family conflict (0.90; 0.91, respectively); job satisfaction (0.81; 0.87, respectively); family satisfaction (0.91; 0.94, respectively); and life satisfaction (0.86; 0.90, respectively). Table 1 provides results consisting of the means, standard deviations, correlations and Cronbach’s alpha of all assessed variables.
Table 1  Results of all assessed variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>WD</th>
<th>FD</th>
<th>WFC</th>
<th>JS</th>
<th>FS</th>
<th>LS</th>
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<td>(0.96)</td>
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<tr>
<td>FD</td>
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<td>(0.86)</td>
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<tr>
<td>WFC</td>
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<td></td>
<td>0.26**</td>
<td>0.26**</td>
<td>(0.89)</td>
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<td></td>
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<tr>
<td>JS</td>
<td>4.91</td>
<td>0.91</td>
<td></td>
<td>−0.40***</td>
<td>−0.21*</td>
<td>−0.39***</td>
<td>(0.81)</td>
<td></td>
</tr>
<tr>
<td>FS</td>
<td>6.01</td>
<td>0.81</td>
<td></td>
<td>−0.37***</td>
<td>−0.52***</td>
<td>−0.37***</td>
<td>0.45***</td>
<td>(0.91)</td>
</tr>
<tr>
<td>LS</td>
<td>4.91</td>
<td>0.91</td>
<td></td>
<td>−0.19*</td>
<td>−0.26**</td>
<td>−0.39***</td>
<td>0.53***</td>
<td>0.55***</td>
</tr>
</tbody>
</table>

*p < 0.05; **p < 0.01; ***p < 0.001

Note: n = 134

Cronbach's alpha coefficients for the variables are given in parentheses on the diagonal

WD: Work Demand; FD: Family Demand; WFC: Work-Family Conflict; JS: Job Satisfaction; FS: Family Satisfaction; LS: Life Satisfaction

WrapPLS version 3.0 was used for all PLS analysis. The model showed a good data fit. All latent variables indicated good AVE scores (a work demand score of 0.80, family demand 0.70, work family conflict 0.51, job satisfaction 0.57, family satisfaction 0.75, and life satisfaction 0.72). All of the variables also passed the discriminant validity test. The cross-loadings were all within acceptable guidelines and $Q^2$ scores were positive. Based on the results, the model appears to be an adequate fit to the data.

In testing the model path coefficient, all manifest variables ought to significantly relate to their associated latent variables at least at the 0.05 significance level. These relationships to their associated latent variables are appropriate indicators of their attendant latent variables. In addition to providing evidence that the manifest variables were good indicators of the latent variables, the relationships between the latent variables supported the hypothesised relationships. The PLS results showed that work demand was positively related to work-family conflict ($\beta = 0.22$, $p < 0.01$). Hence, hypothesis 1a which states that work demand is positively related to work-family conflict is supported. In regard to the relationship between family demand and work-family conflict, family demand was positively related to work-family conflict ($\beta = 0.37$, $p < 0.05$). Likewise, hypothesis 1b, which states that family demand is positively related to work-family conflict, is also supported. The analysis showed that work demand contributed to the positive standardised coefficient beta ($\beta = 0.28$) in relation to work-family conflict lower than family demands did ($\beta = 0.37$). Thus, hypothesis 1c, the magnitude of the relationship between work demand and work-family conflict is higher than that between family demand and work family conflict, is not supported.

Several steps were conducted to gauge the mediating effects of job satisfaction and family satisfaction in studying the outcomes of work-family conflict. First, the analysis must find a significant relation between independent variable (work-family conflict) and dependent variable (life satisfaction). Second, mediating variables (job satisfaction and family satisfaction) were entered into the relationship. A mediating relationship will be supported if the findings showed significant relationships between the independent variable (work-family conflict), mediating variables (job satisfaction/family satisfaction) and the dependent variable (life satisfaction), and no support for the direct relation
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The PLS result supported direct relationship between work-family conflict and life satisfaction ($\beta = -0.42$, $p < 0.01$). However, when work-family conflict and job satisfaction were entered, it was found that the direct effect of work-family conflict to life satisfaction no longer existed ($\beta = -0.13$, n.s.), whereas the effect of work-family conflict to job satisfaction ($\beta = -0.47$, $p < 0.01$) and the effect of job satisfaction to life satisfaction ($\beta = 0.28$, $p < 0.01$) were both significant. Sobel test statistics was also significant (2.88, $p < 0.01$). Those procedures indicated the mediating effect of job satisfaction in the relationship between work-family conflict and life satisfaction. Thus hypothesis 2a, proposing that job satisfaction mediates the relationship between work-family conflict and life satisfaction, is supported.

The PLS result also showed that when work-family conflict and family satisfaction were entered, it was found that the effect of work-family conflict on life satisfaction no longer existed ($\beta = -0.13$, n.s.), whereas the effect of work-family conflict to family satisfaction was significant ($\beta = -0.39$, $p < 0.01$) and the effect of family satisfaction to life satisfaction was also found significant ($\beta = 0.38$, $p < 0.01$). Sobel test statistics was significant (3.21, $p < 0.01$). Thus hypothesis 2b, proposing that family satisfaction mediates the relationship between work-family conflict and life satisfaction, is supported.

Figure 2 explains the findings applied in the research model.

**Figure 2** Findings applied in the research model

Note: $n = 134$

WD: Work Demand; FD: Family Demand; WFC: Work-Family Conflict; JS: Job Satisfaction; FS: Family Satisfaction; LS: Life Satisfaction

## 5 Discussion, implication and limitation

The raising of the Indonesian national budget for educational expenses has led to activities meant to increase the quality of education in the development movement. In addition to providing more opportunities to develop professionalism, the government also demands the lecturers to conduct and get involved in activities which bear high pressure (e.g., taking higher education, participating in various trainings and being assessed by more evaluation indicators). Consequently, the challenges in the domain of work increase
and threaten the lecturers’ conditions in the family domain which also has high pressure derived from marital and parental responsibilities. The role conflict sourced in work and family demands are no longer an exception and has affected the lecturers’ satisfaction in life. This study assesses work-family conflict by examining its sources and outcomes among the Indonesian lecturers in the period of Indonesia educational reform. In the source examination, work demand and family demand positively influence work-family conflict. Moreover, family demand has higher influence on role-conflict than does work demand. Within the outcome examination, the present study finds that work-family conflict negatively influences life satisfaction through job and family satisfactions as mediating variables.

Work demand and family demand have been empirically examined to have distinct contributions towards work-family conflict. These findings support previous related studies (Aryee, 1993; Carlson, 2000; Cinamon, Rich and Westman, 2007; Frone, Russell and Cooper, 1992; Greenhaus et al., 1989; Greenhaus and Beutell, 1985; Yang et al., 2000). Contrary to the hypothesis, the study finds that family demand has a higher positive magnitude towards the conflict in comparison to work demand derived from working condition. As explained in the hypothesis development, work is one of the most common experiences in adult life which influences personal identity and personal life value (Kuchinke, Kang and Oh, 2008). Indonesians are more likely to perceive work as an effort to meet family responsibility. As work may be undertaken primarily to ensure the family’s economic well-being, more time devoted to work by Indonesian employees contributes to more severe work-family conflict. Indonesians prioritise their work demand in order to maintain life stability and sustain the living of the next generations. However, based on the demographic data, the respondents of this study are those who had two children, in the average, within the age of 9. Indonesian lecturers, who are married, having two young children within the age of 9, and living with their spouse and child/children, are categorised as the busiest parents. Having and living with two young children are influential sources of family demand. Pressures derived from time, strain and behaviour to take care of the kids and family consumes majority of the individual resources. These demographics data are indicated as the reason of the higher magnitude of family demand’s impact to work-family conflict in comparison to that of work demand. Even though previous studies found that collectivist societies, included Indonesia, are more likely to prioritise work demand (Aryee, Fields and Luk, 1999; Yang et al., 2000), the findings in this study may need to be considered. The demographic data related to the number of children and their average age must also be considered. The finding may attract future study to examine the relation of these related variables in the discussion of the magnitude of work-family conflict’s sources.

Higher level of work-family conflict negatively effects employees’ well-being including job satisfaction, family satisfaction and life satisfaction. The findings support the addictive effect of stressors in the work and family domains on strain and other outcomes (Greenhaus and Parasuraman, 1986). The notion of the addictive effect posits that the greater the number of stressful domains encountered and the more extensive the stressors within each domain, the greater the impact on strain and well-being of individuals. As shown in the findings, work satisfaction and family satisfaction mediate the negative relationship between work-family conflict and life satisfaction. This mechanism supports the indirect effect of work-family conflict on life satisfaction found in the previous studies (Aryee, Fields and Luk, 1999; Bedeian, Burke and Moffett, 1988; Coverman, 1989; Frone, Russell and Cooper, 1992).
The findings are implied as a managerial alert for the Indonesian government in the movement to develop national education, and, particularly, in managing the Indonesian lecturers. In doing this, the government also needs to seriously consider the lecturers’ stress that is eventually affected by the reform. An individual lecturer in Indonesia is self- and socially conceptualised as a professional scholar in a university or higher-educational institution. In fulfilling their self- and socially required roles in the wake of the education reform, they have to deal more with their work demand.

The programs related to managing work demand can be directed to develop a better human resource management system which clearly shows the vision and goals of the reform period. The elements of the system ought to be transparent to increase the lecturers’ trustworthiness in the movements during the period. The transparency in managing the lecturers may include providing clear job description, measurable performance indicators and rewards to those who achieve the specified goals. The transparency is proposed to decrease the level of role conflict and role overload by further increasing the lecturers’ willingness to be involved in the reform movement. Besides, their willingness to involve can also be encouraged by conducting competency-based management. Training and development activities are provided to those who need to improve their competency. Respecting personal mastery will improve the lecturer’s discretionary effort to be a part of the education movement. A transformational leader is also essential to be an agent of change to provide a clear direction. An adhocracy culture in Indonesian higher-educational institution connects with the application of transformational leadership style (Tuan, 2010). A transformational leader involves the lecturers in a process to achieve common shared goals (Fang, Nastiti and Chen, 2011) through empowerment, creativity and intrinsic motivation towards the job (Chen, Li, and Tang, 2009). The leader must also build a healthy management based on good corporate governance values as an essential drive to move the changes faster by building trustworthiness within the related stakeholders in Indonesia’s educational management. Moreover, a family demand intervention program may also be considered by involving the organisational culture that is supportive in respect to the nonworking issues of the lecturers who are sensitive to family issues. Family-friendly policies, such as providing on-site or near-site child care, leave options related to maternity and spouse care and family allowance for the lecturers who are interested in pursuing further education might reduce the marital and parental stressors.

The government needs to evaluate the dark side of the educational reform in Indonesia, which is depicted in this study by the existence of role-conflict perceived by the lecturers. Without considering the stress management, the education reform might not achieve its goal to increase national education through developing the lecturers’ quality. The successful implementation of the abovementioned proposed methods may reduce the level of work-family conflict. Consequently, it will increase job satisfaction and family satisfaction and that will ultimately affect life satisfaction. High levels of job satisfaction, family satisfaction and life satisfaction will lead to optimum job performance. The activities to manage the conflict must be conducted by involving the government and institution commitments. The government policies are responsible for work-family conflict management, and the institution handles its implementation.

Despite its contribution in the context of academics, this study has a limitation in that it used only a single source of data collection. The dyad perspective of work-family conflict recommends future research to collect data from multiple sources including the subjects (i.e., someone who perceives the conflict) and their related partners/references.
6 Conclusion

The subject of work-family conflict receives considerable attention both in academic and practical fields. The assessment of the conflict among the Indonesian lecturers in the time of Indonesia educational reform is essential to elucidate its impact on the lecturers. This study has empirically examined the sources and effects of work-family conflict on life satisfaction through job satisfaction and family satisfaction as mediating variables perceived by the Indonesian lecturers during this period of educational reform. Based on the findings, attention ought to be devoted to managing stress caused by work-family conflict. Government and institution commitments are needed in order to handle the negative outcomes caused by the Indonesian educational movement.

References


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