de Jager W, Kelliher C, et al., Fit for Self-Employment? An extended person-environment fit approach to understand the work-life interface of self-employed workers, Journal of Management and Organization, Volume 22, Issue 6, pp 797 – 816.

Fit for Self-Employment?

An Extended Person-Environment Fit Approach to Understand the Work-Life Interface

of Self Employed Workers

Abstract

The recent growth in self-employment has sparked scholarly interest in why

individuals choose and remain in self-employment. Yet relatively little is known about how

self-employed workers enact their daily lives and what this means for their work-life

interface. Self-employment is often presented as a means to enhance life choice and as

enabling work and non-work activities to be combined more satisfactorily. However, extant

evidence on how self-employment is experienced is mixed, with some studies reporting long

and irregular working hours and high levels of stress. Furthermore, the way in which self-

employment is experienced may be influenced by national context - economic, institutional

and cultural factors. In this paper, we develop a multi-level model which extends existing

work on the person-environment fit by incorporating factors relevant to self-employment.

The model assists us to understand how contextual factors create both opportunities and

tensions which impact the work-life interface of self-employed workers.

Keywords: Cross-national; Self-employed; Person-Environment Fit; Work-life-balance.

Word count: 7975

Introduction

Around the globe, entrepreneurship and self-employment have been promoted as means to

enhance national and regional economic sustainability (cf., Millán, Congregado, & Roman,

2014), as a means of contributing to economic growth, job creation, and innovation

Published by e-Content Management / Cambridge University Press (CUP): HSS Journals - No Cambridge Open. This is the Author Accepted Manuscript issued with: Creative Commons Attribution Non-Commercial License (CC:BY:NC:3.0). The final published version (version of record) is available online at 10.1017/jmo.2016.41. Please refer to any applicable publisher terms of use.

(Blanchflower, 2000; Carlsson, Acs, Audretsch, & Braunerhjelm, 2009; Nesheim, 2003; Van Stel & De Vries, 2015). Self-employment may include a wide range of actors, selling goods or offering labour, such as "business owners with employees, craft workers, traders, farmers, traditional independent professionals, such as doctors and lawyers, skilled workers, and workers in unskilled occupations" (Annink & Den Dulk, 2012, p. 384). Regarding the solo self-employed, those without (paid) employees, a distinction can be made between 'voluntarily self-employed' and 'involuntary self-employed' (Hughes, 2003). Besides variations in personal drivers and circumstances, the solo self-employed may also be faced with different business contexts. In this paper, we take a broad definition of modes of selfemployment and include the range of (solo) self-employed actors. Self-employment has recently sparked scholarly interest, for example, in why individuals choose and remain in selfemployment (Millán, Congregado, & Roman, 2014; Patel & Thatcher, 2014). However, (solo) self-employment is still an under-researched field and the picture emerging from the literature suggests that the 'blessings' of self-employment are not unambiguous. In scholarly and societal debates, self-employment is often presented as a means to enhance life choices and balance in line with personal values. It can create an ideal environment in which individuals can optimise the subjective and objective consequences for their careers and enable them to combine work and non-work activities in more satisfactory ways. However, the psychological and management literatures on self-employment and the work-life interface (including worklife balance, health and well-being, and work, career, family and life satisfaction) provide us with a somewhat haphazard collection of paradoxical and sometimes seemingly contradicting results, raising more questions about why individuals choose (or are forced into) and remain working as self-employed instead of choosing a traditional mode of employment.

A more holistic multi-level framework, which transcends and integrates individual issues, like work-life balance and job satisfaction, and which includes explanatory factors originating at multiple analytical levels into a comprehensive theoretical perspective would benefit the research field(s) of (solo) self-employment. Relatively little scholarly attention has been paid to *how* the self-employed enact and experience their working and non-working lives, how they manage the relationship between them and how this impacts their work-life interface (including work-life balance, health and well-being, and work, career, family and life satisfaction), which may be influential in whether they remain in self-employment (DeTienne, 2010; Gorgievski, Bakker, Schaufeli, Van der Veen & Giesen, 2010). Weaim to contribute to the scholarly and societal debates on self-employment and the work-life

interface, by presenting an integrated and multilevel **theoretical** model that helps to understand how the interplay of contextual factors creates both opportunities and tensions that impact the work-life interface of self-employed workers. Our theoretical study aims to contribute to the field of self-employment and the work-life interface in several ways.

First, in order to disentangle the complex web of factors at multiple analytical levels that may push individuals towards or pull them away from being a self-employed worker, we present a brief overview of existing studies on self-employment and the work-life interface from the psychological and management literatures (Section 2). Given that the findings are mixed and sometimes contradictory, we conclude that there is a need for a broader contextual perspective in order to understand differences in self-employed workers' work-life interface.

Second, by presenting a cross-national perspective on self-employment, we show how differences in macro and meso contextual factors in three nations (United Kingdom, Netherlands and Japan) not only have the potential to influence individuals' (micro level) decisions to enter and remain in self-employment, but also how these may impact their work and non-work lives and experiences of the work-life interface (Section 3).

Third, in an attempt to reduce the gaps revealed by our literature review (Sections 2 and 3), we build on and extend the insights from the existing Person-Environment Fit (P-E Fit) literature (Dawis, 1992; Dawis, England & Lofquist, 1964; Dawis & Lofquist, 1984; Kennedy, 2005; Kristof, 1996; Kristof-Brown, Zimmerman & Johnson, 2005; Schneider, 1987) to develop a multi-level model. This model presents multiple types of fit which can be used as a theoretical lens to understand how the interactions between macro, meso and micro level factors create opportunities and tensions at the micro-level impacting the enactment and experience of the work-life interface of self-employed workers (Section 4).

Fourth, to illustrate the usefulness of our extended P-E-fit model, we apply this to our three cases (United Kingdom, Netherlands, and Japan) and derive some propositions to guide future research into cross-national differences in how self-employed workers enact and experience the work-life interface (see Section 5). In the final section the limitations of the model, research implications and policy implications are discussed.

Literature Review on Self-Employment and the Work-Life Interface

Multiple Needs, Goals and Values Driving Self-Employment

The literature on self-employment has revealed different drivers for entering self-employment (e.g., Annink & Den Dulk, 2012; Budig, 2006a; 2006b; Carter, 2011; Constant, 2009; Dawson, Henly, & Latreille, 2009; Gorgievski, Ascalon, & Stephan, 2011; JILPT, 2012; Komoto 2008; Masuda, 2006; Milkie & Peltola, 1999; Rebick, 2005; Sakamoto & Spinks, 2008; Tuttle & Garr, 2009). Amongst these are the desire to be one's own boss, and particularly the demand for autonomy and time-spatial flexibility, task diversity, responsibility, 'corporate' social responsibility, and work-life balance. For some individuals, entering self-employment may mitigate the frustration and dissatisfaction associated with the lack of resources such as limited personal development, slow career advancement, and unmet career expectations in previous employment. For others, self-employment is driven by the desire to accumulate greater economic resources. In some cases, self-employment is as a result of a 'push', for example due to corporate downsizing, or by the lack of alternative labour-market opportunities (cf., Pagán, 2009). It is noteworthy that some studies have found gendered differences in the decision to enter self-employment.

Paradoxical Outcomes of Self-Employment

The self-employed work outside of the structures of traditional employment. Those who work on a 'solo' basis are frequently home-based and may adopt working patterns that match their personal goals, values and needs and also those of their clients. However, it remains unclear how this affects their work-life enactment, work-life balance, and well-being. On one hand, the literature has identified a number of positive individual outcomes from self-employment, such as enhanced job security, autonomy and job satisfaction, irrespective of income achieved or hours worked (Benz & Frey, 2008; Binder & Coad, 2013; Hundley, 2001). On the other hand, potential negative outcomes have also been revealed, such as job stress, psychosomatic health-problems, higher overall burnout, emotional exhaustion, a lack of accomplishment, more work-family conflict, and lower family-satisfaction (Jamal, 1997; Jamal, 2007; Parasuraman & Simmers, 2001).

These ambivalent findings have led some commentators to identify a 'paradox of self-employment', describing the self-employed workers' experiences as a 'double edged sword' (Prottas & Thompson, 2006). For example, although self-employed parents in a study by Hillbrecht and Lero (2014) felt that self-employment contributed positively to their sense of control and work-life balance, they also felt that they were 'always on,' needing to be available to both their families and their clients, and this created time pressures. Furthermore, Gold and Mustafa (2013) observed that 'work always wins' if in conflict with self-employed

workers' domestic arrangements, resulting in irregular working hours and interwoven work and non-work-commitments. In a similar vein, Hyytinen and Ruuskanen (2007) found that although autonomy may be an indicator of flexibility, self-employment was associated with longer hours and working at atypical hours.

Various factors have been identified as influencing the outcomes from selfemployment. These include the stability of work (Aguilar, García Muñoz, & Moro-Egido, 2013), gender of the worker (Gimenez-Nadal & Ortega-Lapiedra, 2010; Craig, Powell, & Cortis, 2012; Duncan & Pettigrew, 2012), and the use of physical boundaries (Mustafa & Gold, 2013). In a study including 23 countries, Benz and Frey (2008) reported that selfemployed workers are substantially more satisfied with their work than employed workers. This finding confirms the outcomes of other studies (cf., Blanchflower & Oswald, 1998; Blanchflower, 2000; Kawaguchi, 2002; Hundley, 2001). Strikingly, self-employed workers are more satisfied with their work, despite having lower earnings and working more hours than employed workers (Cholotta & Drobnič, 2011). Álvarez and Sinde-Cantorna (2014), however, suggested that the positive effect of self-employment on job satisfaction can be attributed to higher levels of time-spatial flexibility and work autonomy. Another important aspect is volition as a key factor, since the 'involuntary self-employed' have been found to experience different outcomes than the 'voluntary self-employed' (Binder & Coad, 2013). Nevertheless, although the self-employed were found to be more satisfied than employees in terms of the type of work activities undertaken, they were less likely to be satisfied in terms of job security (Millán, Hessels, Thurik, & Aguado, 2011).

Cross-National Perspective on the Work-Life Interface of Self-Employed Workers

It can be argued that the effects of the opportunity to change one's work and non-work domain may, or may not be penalised (Vinkenburg, Van Engen, & Peters, 2015), depending on the *contexts* in which the self-employed enact their work and non-work lives. Although all modes of self-employment commonly tend to provide limited access to sick pay and pension provisions and lack representation by labour unions (Keizer, 2013), some modes of self-employment may be more vulnerable than others due to local contextual factors. Moreover, the values and goals that need to be achieved in the national environment in which the self-employed operate may not be in congruence with an individual's values and goals. As such, the outcomes of self-employment at the micro-level may directly, or indirectly, be influenced

by macro level factors. Other potential influences are institutional factors and cultural factors. In addition, household level factors may affect the outcomes of self-employment at the microlevel. Of course, these macro, meso, and household factors all interact, influencing how self-employed workers enact and experience the work and non-work interface.

Micro-Meso-Macro

Discussing the influences of macro level factors such as the national institutional, economic and cultural contexts on an individual's choice for a certain mode of (self) employment touches on the debate of the micro-macro divide. On the one hand there is the issue of fundamental differences in the theoretical assumptions and methodological traditions of management scholars and psychological researchers about micro-macro divides, and even within both these disciplines there are divides concerning the actual definitions of micro and macro environments (Molloy, Ployhart and Wright, 2011). On the other hand there is the issue of the dichotomous micro-macro divide as being too general, lacking a meso level of reality (Dopfer, Foster and Potts, 2004; Reid, Sutton and Hunter, 2010). Erez and Gati (2004) not only propose a multilevel model of culture, but also posit that culture has a dynamic nature in which there are both top-down influences as well as bottom-up influences. Culture as a dynamic entity with a complex interplay between the different levels of culture.

Kossek and Ollier-Malaterre (2012) propose a multi- cross-level model linking individuals to organizations in a cross-national context concerning work-family policies and stress the influence of nested relationships. They argue, building on a review of existing frameworks by Bardoel & de Cieri (2006):

"Multi- and cross-level models are particularly relevant in the work-life field where social policies at the macro level, corporate practices at the meso level and individual needs and expectations at the micro level are closely interlinked" (Kossek & Ollier-Malaterre, 2012, p23).

By subdividing the national institutional, economic and cultural contexts in macro, meso and micro levels to better understand what influences self-employment in different countries, a multi-cross-level model approach is required. For reasons of clarity, in the present study the definition for the micro-level is the individual's direct personal context. The meso-level concerns the groups the individual is a member of or directly has contact with. Groups in this meso-level context consist of members the individual personally (mostly) knows, like

his/her household, the organization (s) he is working for or the intermediary the individual

works with to find new contracts. The macro level-being the national, global and impersonal

context.

Cross-National Differences Accounting for Variations in the Self-Employed Work-Life

Interface

Our literature review located studies from several countries (e.g., Australia; Canada;

Japan; Netherlands; Pakistan, South Africa, Spain; Sweden; United Kingdom; United States

of America), indicating strong global interest in (solo) self-employment. It might be argued

that the ambivalent outcomes of self-employment revealed by our literature review may be

partly attributed to the variety of national macro contexts impacting both the meso and micro

level conditions and outcomes (Hinks & Gruen, 2007; Saarni, Saarni, & Saarni, 2008),

however cross-national contextual differences have not, in the main, been taken into account.

Acknowledging the varieties in the macro context allows for the possible impact of the

nations' macro contexts (economic, institutional and cultural) to be investigated. In this paper

we examine the influence of the macro context of the UK, the Netherlands and Japan. These

nations were chosen because they represent very different contexts, providing a rich

understanding of how these national contexts influence self-employment. Meanwhile, though

different in cultural and/or economic perspectives, these nations also share strong similarities,

which are discussed below, enhancing comparability opportunities. We focus on the

organisations and the intermediaries (meso level) that operate between these organisations and

self-employed workers in each country (macro level), the conditions of the household (meso

level), and the outcomes experienced at the individual level (micro level). Figure 1 illustrates

the relationships between all three (macro, meso, and micro) levels.

Figure 1 about here

Contextual Influences: evident in UK, Netherlands, Japan

Economic systems. The prevalence, mode and type of self-employment is likely to be

influenced by the national context in which the self-employed operate. National contexts can

7

be classified according to contrasting business systems of 'liberal' and 'co-ordinated' market-economies (Hall & Soskice, 2001).

Liberal market-economies (LMEs) are characterised by a free-market approach where institutions are intended to facilitate rather than constrain market forces. As a result, LMEs are often dynamic, innovative, and willing to shift into new areas of business activity (McCann, 2014).

Co-ordinated market-economies (CMEs) are characterised by a higher degree of state regulation and different financing structures for business, allowing a longer-term perspective to be adopted. Instead of shareholder interests being dominant, a broader stakeholder approach predominates. In this contribution, we illustrate self-employment in the context of two countries where self-employment is growing, but in contrasting business systems (UK-LME; the Netherlands-CME). In addition, we include Japan, a CME where self-employment is currently a less significant feature of the economy and in contrast to the Netherlands, where coordination is organised at *national level*, in Japan coordination is organised at *enterprise level*. However, although Japan and the Netherlands share the same business system (CME), culturally the Netherlands is more similar to the UK than to Japan (Hofstede, 2001; Hofstede, Hofstede & Minkov, 2010). To make sense of this complex web of cross-national differences and similarities, the macro context is divided into three sub-contexts: economic, institutional, and cultural, which are explored below.

Economic. In the UK, approximately 15% of those in work in 2016 (Q1) were identified as self-employed, rising from 13% in 2008, and the UK has experienced the third largest percentage increase in self- employment across the EU since 2009 (Office for National Statistics, 2016). In particular there has been a rise in self-employment amongst the over-65 year olds. Self-employment is prevalent in certain industries, including construction, transport (taxi and delivery drivers) and recent growth amongst professional, scientific and technical workers. Commentators have argued that growth is limited due the lightly regulated labour-market, which means that standard work is relatively cheap, which constrains the demand for alternative employment (Keizer, 2013).

Moving the focus to the Netherlands, it is projected that one third of the workforce of large corporations will soon be flexible workers (Verbiest, Goudswaard, & Van Wijk, 2014), since the percentage of solo self-employed has been on the rise in recent years [10% in 2010 compared to 12% in 2016 (Q1) (Central Bureau of Statistics (NL), 2016).]. Solo self-

employment is often 'opportunity motivated' and often undertaken by experienced, highly educated, male workers, from the nation's ethnic majority (Dekker, 2010). They mostly work in the fields of specialised business-services, trade-commerce, construction, financialservices, culture, sports and recreation and Information and Communication Technologies (ICT) (CBS-data analyzed, commissioned by ikwordzzper.nl, 2013) and occupy a relatively strong labour-market position. Despite an enduring economic crisis, the revenue of selfemployment has been stable for the last five years (De Jager, 2013; ZZP Barometer, 2014). In Japan the self-employment rate has declined since 1975 [11.1% in 2015 compared to 22.3% in 1990 (Statistics Bureau of Japan, 2016]. Although new types of self-employment, such as ICT professionals, have attracted some attention in recent years, this has not become a major trend (Saitoh, Sakamoto, & Spinks, 2009). The number of specialist and/or technical selfemployed businesses has been increasing since the 1990s, but not sufficiently to offset the decrease of those in the agricultural and retail sectors. Since the early 1990s, Japan struggled through what has come to be known as the "lost decade." However, amongst female and young workers, alternative employment modes have rapidly risen during the last decade (JILPT, 2012; Rebick, 2005).

Overall these three economic contexts show different trends. In the Netherlands and the UK self-employment rates have risen, albeit in different industries and amongst different age cohorts and demographical subgroups, while in Japan the self-employment rate has fallen although it is becoming more popular for certain demographical subgroups, namely females and young workers.

Institutional. In the UK, self-employment constitutes a buffer that allows organisations to respond to fluctuating market-demands and which also affects unions' strategies towards organisation of the self-employed (Keizer, 2013). Self-employed benefit from tax advantages but also receive fewer work-related social benefits. Unions have voiced concern over so-called 'bogus self-employment' where workers are required to become independent contractors by a former employer, since this may be against the interests of the worker (Keizer, 2013). This is estimated to be about 1% of all self-employment, although measuring bogus, or false self-employed is extremely difficult (Institute for Public Policy Research, 2015). Non-profit organisations such as the Association of Independent Professionals and the Self-Employed (IPSE) act as a lobby group for the interests of the self-employed in the United Kingdom.

In the Netherlands the government actively promotes self-employment as a means of boosting the competitiveness of the Dutch economy (SER, 2010), while at the same time developing laws to counter bogus self-employment (Government of the Netherlands "wettekst Beschikking Geen Loonheffing (BGL)" (English: law text decision no payroll tax), 2014). Opponents have however argued that this discourages employers from hiring self-employed professionals and are likely to choose temporary workers instead. The labour unions 'FNV Zelfstandigen' (English: FNV independents) and 'CNV Zelfstandigen' specifically organise the self-employed. The self-employed are also represented in the Social and Economic Council at the highest level of representation. In addition, national and local non-profit groups lobby for the interests of self-employed professionals. Contrary to the UK, in the Netherlands self-employed do not have specific tax advantages, they do enjoy an "entrepreneurs deduction" for their business, just like any other businesses (Belastingdienst (English: tax authorities), 2016).

The Japanese labour-market legislation can be characterised by *dualism* (Ishikawa & Dejima, 1994). Internal labour-markets offer lifetime employment which guarantees stability of position, career development and increases in salary, whereas external labour-markets offer temporal-flexible jobs with low wages, few benefits and little job security (Jones & Urasawa, 2011; Hauseman & Osawa 2003). In the light of demographic issues, such as an aging and declining population, current Japanese economic policy supports local economies by revitalizing agriculture, forestry and fisheries and assisting business start-ups and micro enterprises. Self-employment has been identified as a viable option for both the elderly and women to make use of their experience by starting up their own businesses and to balance work and family life (Prime Minister of Japan and His Cabinet, 2014). However, Japanese enterprise unions view self-employed workers as outsiders to the enterprise community and merely as employment buffers (Keizer, 2013).

In summary, in the UK the government offers tax advantages for self-employment, but at the cost of social benefits. Concerns have been expressed however by commentators including unions about the growth of bogus self-employment. In the Netherlands there are no tax incentives but the government actively tries to counter bogus self-employment. The interests of the self-employed are represented by labour unions specifically for self-employed and these are represented at the highest level. In Japan, for those with no access to the 'cradle to the grave employment' self-employment may be a viable option, perhaps as a second choice or on a temporal basis.

Cultural. Entrepreneurship is embedded in the culture of both the British and the Dutch (Gelderblom, 2004) and both have a tradition as sea-faring and trading nations. Although often being grouped under larger headings serving Dutch state policy, for example, the Dutch East India Company (VOC), entrepreneurs operated in a wide variety of smaller independent businesses and (solo) self-employed (Gelderblom, 2004).

Traditional Japanese culture, in contrast, can be characterized as homogeneous and group-oriented in which solo entrepreneurship or individual activity is not prioritised. In line with this, organisations' Japanese-style human resource management is based on the "we are one family" philosophy, having lifetime employment, seniority wage system and in-house unions (Koike, 1999).

Hofstede (2001) and Hofstede, Hofstede and Minkov (2010) have conducted influential studies comparing over 70 nations on six dimensions: power distance, individualism versus collectivism, masculinity versus femininity, uncertainty avoidance, long term orientation versus short term normative orientation, and indulgence versus restraint. On three of the dimensions, power distance, individualism/collectivism and indulgence/restraint, the United Kingdom and the Netherlands score similarly and clearly differ from Japan. Japan exhibits a larger degree of power distance, a higher degree of collectivism and a lower degree of indulgence compared to the United Kingdom and the Netherlands. On the other three dimensions, there are differences between all three nations (www.geerthofstede.nl, 2015).

A Multilevel Model to Understand Contextual Factors Impacting Self-Employed Work-Life Interface

Conceptualising the Work-Life Interface

In order to disentangle the factors explaining the variation in outcomes of self-employment for individuals' work-life enactment, balance and well-being revealed by our literature review, we propose a theoretical model to study a variety of different modes of self-employment and types of work. In order to allow for some generalisation, the model takes into account the various different modes of self-employment. Moreover, in order to develop a more holistic understanding on how self-employment impacts the work-life interface at the individual level, it is important to start from a wider perspective that can be applied to all of the self-employed workforce, regardless of, for example, gender, age, household situation, ethnicity, and work-(dis)ability.

The current work-life literature has been critiqued as being too narrowly focused on parents and carers (De Janasz, Forret, Haack, & Jonsen 2013; Greenhaus & Powell 2006; Ozbilgin, Beauregard, Tatli, & Bell 2011). Thus, our theoretical model considers the work-life interface encompassing the relationship between work and non-work, including non-domestic activities which have received little attention to date (e.g., leisure pursuits, community involvement, participating in religious or volunteering activities, supporting extended families) (cf. Eby et al., 2005).

Person-Environment Fit Theory as a Theoretical Lens

The Person-Environment-Fit Model (P-E Fit) is a well-known theory that has often been used to analyse general well-being, job satisfaction, and intention to quit of employed workers (Caplan & Harrison, 1993; Dawis, 1992; French, Caplan & Harrison, 1982; Kristof-Brown, Zimmerman, & Johnson, 2005; Muchinsky & Monahan, 1987; Ostroff & Schulte, 2007). The model postulates, as the name implies, the degree to which an individual employee (mis)fits with his/her work environment. A misfit is likely to lead to an individual changing jobs as a result of quitting, or getting fired, or even returning to education to retrain for a new job. A good fit is likely to predict a stable and successful career. Whether an individual fits his/her work environment is dependent on the degree to which an individual's characteristics, abilities, expectations, needs, and personal values are met or shared by the demands of the job, the work culture, intrinsic and extrinsic rewards, and the values of his/her employer (Holland, 1985a, 1985b; Kennedy, 2005; Kristof, 1996; Kristof-Brown, Zimmerman & Johnson, 2005; Schneider, 1987; Schneider, Kristof-Brown & Goldstein, 1997; Talbot & Billsberry, 2010). Fit however may not be a fixed state. Both parties involved, worker and employer seek a state of congruence. They actively pursue, reactively and/or passively, a good fit for mutual benefit (ibid.).

An adaptation of Person-Environment Fit theory is the Theory of Work Adjustment (Dawis, 2002, 2005; Dawis & Lofquist, 1984). This theory has a narrower perspective, focussing mostly on the fit of an individual within an organisation, the resulting satisfaction levels, and the degree of person-environment *correspondence*. This is a construct which is very similar to congruence and refers to the continual process of adjustment in which the individual and the organisation try to match one another's needs and supplies - supplies being everything either side has to offer that could be of use to the other, for example, financial rewards, training, skills or personality characteristics.

Applying the PE-Fit theory to Self-Employment

Self-employment can be seen as a means to enhance life choice and balance in line with personal values, to create an ideal environment in which to optimise the subjective and objective consequences for one's work career and to enable the combination of work and non-work activities in more satisfactory ways. It then follows that the Person-Environment Fit Model is a logical approach to examine self-employment, and the self-employed workers' work-life interface.

Over many years, the development of the P-E-Fit literature has generated several different P-E Fit measures. It should be recognised, however, that to date, many studies building on P-E-Fit theories have employed a rather narrow focus. More recently some studies have suggested using multiple P-E Fit measures (Chuang, Shen, & Judge, 2016; Edwards & Billsberry, 2010; Kennedy, 2005; Sekiguchi, 2004; Yu, 2016). In line with this, we propose using multiple P-E Fit measures in order to explain self-employed workers' work-life interface. Although previous studies have proposed integrating multiple levels of P-E fit (ibid.), the non-work domain has largely been ignored. Below, we will explore four measures widely used in the literature and reflect on their usefulness for this study. These measures are: Person-Organisation Fit (P-O Fit); Person-Vocation Fit (P-V Fit); Person-Job Fit (P-J Fit); and Person-Group Fit (P-G Fit). In order to complement our model, we will conclude by presenting the often neglected fit with the home domain.

Person-Organisation Fit focuses on how an individual and an organisation meet each other's expectations and demands or needs and to what degree values and goals are shared. In short, this concept is often referred to in terms of needs versus supplies and value congruence (Boon & Hartog, 2011; Cable & Judge, 1996; Caplan, 1987; Chatman, 1989; Kristoff, 1996; O'Reilly, Chatman & Caldwell, 1991). Needs versus supplies, on the one hand, refers to the needs an individual has, both psychological and economic (e.g., having a cognitively challenging job, a sense of belonging, a certain income, job security). On the other hand, the individual supplies his or her skills, personal characteristics, and experience. The organisation, in turn, might be in need of, for example, specific skills, a certain number of workers, certain levels of experience, and provides the individual with economic rewards, financial stability, and possibilities to build a career, develop skills, and access further training. The needs of self-employed workers are likely to differ from the needs of traditionally employed workers, possibly related to the reason why they became self-employed in the first place. Gaining insight into the specific needs of the self-employed might

provide organisations with insights to find and build ties with self-employed workers and their organisation or network.

Value congruence is the degree of similarity between the values held by the individual and those held by the organisation that he or she works for. Values, as described by Edwards and Cable (2009, p 655) based on prior research (Meglino & Ravlin, 1998; Rokeach, 1973; Schwartz, 1992), can be defined as judgements about the importance of certain end-states and normatively desirable behaviours. While normatively desirable behaviours are likely to be of less importance for self-employed, as they may not work for any one organisation for a long time, the importance of certain end-states is likely to be of a much greater importance. Incongruence between the values that drive the self-employed towards their chosen end-states and organisational values, or the inability of organisations to accommodate the values that drive the self-employed might explain much of the current problem that the self-employed and organisations face finding and maintaining relationships with self-employed workers.

Person-Vocation Fit is a measure of congruence between an individual's vocational interests and the work environment to make such a vocation possible (Furnham, 2001; Harris, Moritznes, Robitschek, Imhoff, & Lynch, 2001; Holland, 1985a, 1985b; Parsons, 1909; Tracey & Rounds, 1993). Instead of focussing on the relationship between an individual and a specific organisation or even a specific job, Person-Vocation Fit addresses the extent to which an individual is satisfied with his/her profession or vocation in general. (Dis)Satisfaction can arise from disappointing job opportunities in relation to personal expectations from a viewpoint of a vocational career. In addition, the work environment of a self-employed worker following a particular vocation is likely to differ from the work environment of a traditional employee. Person-Vocation Fit is likely to be significantly influenced by a nation's economic, institutional and cultural context, inhibiting and/or encouraging following a vocation as a means to self-employment (Gorgievski, Ascalon & Stephan, 2011). The economic context might, for example, encourage such a career while the cultural context might inhibit it.

Person-Job Fit is defined by Edwards (1991) as the fit between an individual's abilities and desires and the demands and attributes of a specific job. It is also described by Kristof (1996) as demands versus abilities. Narrower than Person-Organisation Fit and Person-Vocation Fit, Person-Job Fit explicitly examines the degree of satisfaction resulting from the match of specific demands of a certain job concerning the required skills, personality characteristics and employability of an individual with the actual skills, abilities and

personality characteristics of that individual. The individual may, for example, be overwhelmed by the demands of the job, or alternatively not sufficiently challenged by the demands of the job.

Since Person-Job Fit has predominantly been researched using traditionally employed workers, a similar concept could be added to address self-employed workers. As they do not have a job in the sense that employees have a job, but rather have contracts to carry out assignments for organisations or to sell goods to certain clients, an equivalent fit measure would be a Person-Contract Fit (P-C fit), describing the match between the requirements of the contract and the abilities of the self-employed worker. Since self-employed workers generally have more flexibility and autonomy than employees to decide what kind of job/contract demands they prefer to do, a good Person-Contract Fit might reflect higher levels of job crafting opportunities, possibly enhancing overall wellbeing for the self-employed. In line with the literature which examines other forms of non-standard work where constructs have been adapted to reflect the work arrangement, a separate study could explore the viability of a Person-Contract Fit and the possibility to use it as a measure to compare employees and self-employed workers in regard to their satisfaction with their work and rewards (financial) and to what degree these are matched by their abilities and expectations (financial).

Person-Group Fit is a measure of fit concerning the compatibility between an individual and his or her co-workers related to group-oriented outcomes and the need for cohesion (Boon & den Hartog, 2011; Werbel & Johnson, 2001). P-G Fit is sometimes referred to as Person-Team Fit (P-T Fit). The importance of group-oriented outcomes might be different for the self-employed. Although the self-employed might lack cohesion with the organisation they currently work for, the need for cohesion may be met by becoming part of a network of self-employed workers. Thus a desirable level of cohesion can be achieved without losing a sense of autonomy, often important for self-employed workers. These networks can subsequently be of value to self-employed on a meso level, increasing their chances of finding contracts or attaining other professional goals.

Traditionally P-E Fit literature has focused on the work environment, neglecting the non-work environment and does not take into account self-employed workers. This calls for an extension of the P-E Fit Model. The four fit measures described above, Person-Vocation Fit, Person-Organisation Fit, Person-Group Fit and Person-Job Fit / Person-Contract Fit, can be grouped as being an individual's Person-Work Fit. To complement this fit with the work

environment, a group is introduced by our theoretical model to cover the non-work environment, namely the Person-Home Fit, explaining variations in the work-life interface of self-employed workers in various non-work contexts. The model therefore takes into account that an individual's environment encompasses both work and non-work domains. This allows us to investigate how home demands and resources affect opportunities, tensions, choices and experiences in the self-employed workers' work-domain.

We argue that refining P-E Fit to include the entire environment, work and non-work, gives more credit to the fit that self-employed workers need to achieve in order to manage the work-life interface in a satisfactory way. On the one hand including the fit between self-employed workers, their assignments and the organisations they work for and on the other the fit between self-employed workers and their non-work domain and the particular demands and resources experienced there. Hence, examining how their personal values and needs fit the entire environment.

Person-Home Fit refers to the household, leisure time, personal health and the social groups to which one belongs. To the knowledge of the authors, no non-work domain person-environment fits have thus far been investigated in the context of the person-environment fit model. This gap in the literature could be addressed by developing the following aspects of Person-Home Fit.

Person-Household Fit. The home or personal situations consists first of all of a household. Whether consisting of a family, shared non-family living or living alone, this personal context influences wants and responsibilities which subsequently influence the work domain. This context is named Person-Household Fit (P-HH Fit).

Person-Leisure Fit. Another important aspect of an individual's personal life is how (s) he spends leisure time, this is grouped as Person-Leisure Fit (P-L Fit). Being exposed to less job security might translate to more stress experienced by the self-employed which could be offset by (the need for more) leisure time to unwind and/or to switch off from work. Since self-employed workers are reported to work longer hours, Person-Leisure fit might explain certain tensions experienced and problems faced by the self-employed, potentially leading to health problems.

Person-Health Fit. Health is likely to be an especially important consideration for the self-employed, since they are unlikely to have access to sick pay if unable to work. Where one person cannot work due to lower back problems, another might continue working, even

though suffering from a form of amyotrophic lateral sclerosis (ALS), as with one of the brightest minds of our time working in theoretical physics. This health aspect, consisting of both physical and psychological aspects, is named Person-Health Fit (P-He Fit).

Person-Social-Life Fit. An important aspect of an individual's home context is with whom (s) he associates. This might partly overlap with the leisure fit measure, but not necessarily so, and also with work fit-measures if, for example, colleagues become friends. However the social groups, outside of the household and the work environment, such as groups of friends, religious and volunteering groups, should also be considered. Problems at work can, for example, be discussed with friends or other self-employed workers from one's network, which in turn potentially influences the work domain. Therefore we include Person-Social-Life Fit (P-SL Fit) in Figure 2.

Figure 2 about here

Thus in summary, our conceptual model incorporates multiple aspects of the work domain: Person-Organisation Fit, Person-Vocation Fit, Person-Group Fit and Person-Job/Contract Fit; and multiple aspects of the non-work domain: Person-Household Fit, Person-Leisure Fit, Person-Health Fit and Person-Social-Life Fit. This enables the identification of choices or trades that the self-employed may make. For example, an individual may favour a good Person-Vocation Fit as a result of certain personal values, even where it is recognised that one's Person-Organisation Fit or Person-Leisure Fit will suffer as a result. Consequently this may expose bottlenecks, meaning problems often faced by self-employed workers and the organisations who make use of the services of self-employed workers, and creates tensions that the self-employed face in their work and non-work environments by choosing to work in this way.

On the one hand, the opportunities for the self-employed to increase their own personenvironment fit and thus pursue a desired work-life interface are many. Transcending the, still important, influence of autonomy and flexibility. On the other hand, society may be rather incongruent, not matching self-employed needs optimally or even adequately, concerning multiple aspects of self-employed workers work and non-work domain inhibiting possible optimal work-life interfaces sought by self-employed workers.

Applying the Complete – Person - Environment Fit Model to Three Cases (UK, Netherlands, and Japan)

In order to illustrate the usefulness of our Complete-Person-Environment Fit Model, we apply this to our three country cases (UK, Netherlands, and Japan). We also derive a number of propositions to guide future research into the field of cross-national differences in how self-employed workers enact and experience the work-life interface (see Figure 3).

Figure 3 about here

By comparing the UK, the Netherlands and Japan, we argue that our model assists with the analysis and understanding of differences in the work-life interface of self-employed workers, by identifying where and on which level(s) there are opportunities and tensions for self-employment. As can be seen in Figure 3, the national economic, institutional and cultural contexts can influence the self-employed work-life interface directly. For example, an institutional (macro) influence on Person-Health Fit (micro), as well as indirectly, for example, certain economic conditions (macro) that influence employers (meso) influencing in turn Person-Organisation Fit (meso) and Person-Vocation Fit (micro).

As described earlier, levels of self-employment are rising in the UK and the Netherlands and declining in Japan (Central Bureau of Statistics (NL), 2016; Office for National Statistics (UK), 2016; Statistics Bureau of Japan, 2016; Souren, 2013). Culturally the UK and the Netherlands are more similar, when compared to Japan. In these countries it is possible that culture has led to the values associated with self-employment being more accepted thus increasing the Person-Vocation Fit for would-be self-employed workers. In contrast, Japanese culture is more likely to negatively influence Person-Vocation Fit for the self-employed. Economically however, as co-ordinated market-economies, Japan and the Netherlands share an economic model that accommodates self-employment better, than that in the UK where there is a liberal market economy. Institutionally, the UK has provided some tax advantages for the self-employed, but is not otherwise heavily involved in promoting self-employment. The Netherlands is actively promoting self-employment on a national level and Japan only promotes self-employment for certain groups - the elderly, women returners and

to some degree young workers (JILPT, 2012; Prime Minister of Japan and His Cabinet, 2014; Rebick, 2005; SER, 2010). All these **theoretical** influences of the national macro level contexts influencing the choice, on a micro level, to start working as a self-employed worker are summarized in Table 1:

Table 1 about here

As shown in Table 1. combined, the national macro level contexts can explain in part why self-employment rates are rising in the UK and in the Netherlands and why it is falling in Japan.

Examining meso and micro levels, these influences can be analysed to understand to what degree they influence (in) congruence on all the different aspects of the work and nonwork person-environment fit dimensions. Legislation is likely to enable or inhibit the needs of organisations and self-employed workers and the supplies they are able to give each other. Individuals pursuing certain values are thus encouraged or inhibited to achieve their preferred end-states, their preferred work-life interface conditions. For example, due to favorable economic, cultural and institutional conditions, there are multiple organisations in the Netherlands that act as brokers for self-employed workers and large companies. These brokers, help both to locate each other and increase the Person-Organisation Fit by trying to optimize one another's needs and supplies. This in turn increases the Person-Vocation Fit for individuals considering starting working on a self-employed basis. In Japan however, even though there are some economic opportunities to start working on a self-employed basis, this is significantly outbalanced by the negative cultural status of the self-employed and the lack of legislative support, making the work-life interface of self-employment rather unappealing and career and life success as a self-employed worker unlikely. This cross-national example leads to the following proposition:

Proposition 1: Cross national differences in why individuals choose to be selfemployed and pursue certain work-life interface end-states can be explained by using the Complete-Person-Environment Fit Model and integrating it in a multilevel, macromeso-micro, approach. The Complete-Person-Environment Fit Model can also explain ambiguous outcomes in the work-life literature of self-employment, such as a high satisfaction even though working hours are longer and income is lower. Only by looking at all levels of Person-Environment Pit, can it become clear that given the values an individual pursues, a self-employed worker can for example enjoy what (s)he is doing, due to an increased Person-Vocation Fit and Person-Contract Fit, even though his/her Person-Organisation Fit is lower. At the same time they may enjoy a higher Person-Household Fit and Person-Social-Life Fit, in spite of the possible risks to their Person-Health Fit and also maintain an adequate Person-Group Fit by becoming a member of a network of self-employed professionals. This leads to the second proposition:

Proposition 2: By taking into account all levels of Person-Environment Fit, ambiguous outcomes can be explained / prevented by understanding how certain tensions are outweighed by other benefits.

Conclusion and Discussion

Using a multi-cross-level model in self-employment research can clarify current seemingly contradictory results and add structure to the field by providing a framework. The Complete-Person-Environment Fit Model is proposed as a dynamic design in longitudinal studies that is likely to provide more insights into why individuals choose to be self-employed and subsequently whether they choose to remain working in this way. Individuals might initially be tempted by a better Person-Contract Fit and Person-Organisation fit, but then be deterred by a skewed work-life interface and want to return to traditional employment or instead of being deterred they may be further enticed by a better overall Complete-Person-Environment Fit and so remain self-employed.

There are many possibilities for further research on the self-employed using the Complete-Person-Environment Fit Model as a framework. By combining multiple research ideas, different environment fits, self-employed and traditionally employed workers, different perspectives can be achieved, combined and compared, increasing our understanding of the values that drive the self-employed and increasing our understanding of the work-life interface self-employed pursue as desirable end-states.

Using the model not only as a framework, but also as an exploratory engine to understand why certain work-life interfaces are pursued or not due to the perceived difficulties in achieving them, which values individuals prioritize and which values are discarded as a result of contextual factors, might be very useful to discover, existing and new, possibilities and tensions of self-employment. When combined in an international, multilevel model, both opportunities and perceived problems could be located in society and respectively made use of and solved. This broader perspective could unlock the true potential of self-employment as a means to enhance national and regional economic sustainability further and self-employment as a mode of employment with optimal work-life interfaces for self-employed workers.

Limitations and research implications

Shortcomings of the Complete-Person-Environment Fit Model are that by itself it does not explain anything, one might argue that specific themes within self-employed research are merely shifted around, financial rewards under Person-Organisation Fit and autonomy and flexibility under Person-Vocation Fit for example, without solving any of the existing, sometimes paradoxal, results. The strength of the model however is its role as a framework, providing a "coat rack" to better categorize certain findings so as to better compare and summarise findings in the field of self-employed research as a whole. Second the model provides a springboard from which to hypothesise new research at the micro, meso and macro levels or a mixture thereof.

Another shortcoming might be that the model is broad and tries to cover too much ground However, we argue that the strength of the model is that it functions as a framework. Not all aspects have to be used at the same time in each study. Another advantage of this broad model is that with its springboard function, the possibilities for research are substantial.

The model is theoretical and many parts require tested empirically, such as Person-Contract Fit, or are yet to be developed, such as the Person-Home Fit measures. It is likely the model will evolve as problems and thresholds are encountered along the way, further adding to the self-employed research field and scholarly debate on self-employment and work-life interface.

Policy implications

Instead of focusing on the effect of social insurance or the lack thereof for the self-employed, Person-Health Fit could be included more fully by researching the influence on mode of (self) employment, its role within the Complete-Person-Environment Fit Model and its value in the work-life interface. This could lead to better adjusted forms of insurances, or other forms of social legislation, for self-employed.

Person-Household Fit could influence child-care options or other forms of household support such as caring for an elderly family member or disabled or sick household member. Person-Social-Life Fit and Person-Leisure Fit are more likely to stay in the private sphere, although knowledge about their importance might influence legislation and human resources policy if for example it becomes clear these fits provide adequate buffers against burn-out, depression or fatigue,.

By identifying opportunities and tensions of self-employment in society, the Complete-Person-Environment Fit Model can be instrumental in informing human resource departments of organisations and businesses and for legislation enacted by governments to increase the competitiveness of their economies and by providing helpful legislation and policies for self-employed. The self-employed can benefit from such legislation and from up to date HR departments directly or use the results of research making use of the Complete-Person-Environment Fit Model for personal introspection, improving their positions and careers in society by finding their own (mis)fits and adjusting their work-life interface accordingly. On an international level, countries can learn from each other from the effects of the economy, legislation and culture on self-employment and individuals can again use this to their advantage.

References

- Aguilar, A.C., Garcia Munoz, T.M., & Moro-Egido, A.I. (2013). Heterogeneous selfemployment and satisfaction in Latin America. *Journal of Economic Psychology*, 39, 44-61.
- Álvarez, G., & Since-Cantorna, A.I. (2014). Self-employment and job satisfaction: an empirical analysis. *International Journal of Manpower*, *35*(5), 688-702.
- Annink, A., & Den Dulk, L. (2012). Autonomy: the panacea for self-employed women's work-life balance? *Community, Work and Family, 15,* 383-402.

- Bardoel, A., & de Cieri, H. (2006). Developing a work/life strategy in a multinational enterprise (MNE). *A Sloan Work and Family Encyclopedia Entry*. Retrieved March, 6, 2016 from: http://wfnetwork.bc.edu/encyclopedia_entry.php?id=3814&area=All
- Belastingdienst (English: tax authorities) (2016). *Zzp'ers* (English: Self-employed without paid help). Retrieved Juli, 24, 2016 from:

 http://www.belastingdienst.nl/wps/wcm/connect/bldcontentnl/campagnes/landingspaginas/zakelijk/zzp/
- Benz, M., & Frey, B.S. (2008). Being independent is a great thing: subjective evaluations of self-employment and hierarchy. *Economica*, 75, 362-383.
- Binder, M., & Coad, A. (2013). Life satisfaction and self-employment: a matching approach. Small Business Economics, 40, 1009-1033.
- Blanchflower, D.G. (2000). Self-employment in OECD countries. *Labour Economics*, 7, 471-505.
- Blanchflower, D.G., & Oswald, A.J. (1998). What makes an entrepreneur? *Journal of Labor Economics*, 16, 26–60.
- Boon, C., & den Hartog, D.N. (2011). Human resource management, person-environment fit, and trust. *Trust and human resource management*, 109-121.
- Budig, M.J. (2006a). Intersections on the road to self-employment: Gender, family and occupational class. *Social Forces*, 84(4), 2223-2239.
- Budig, M.J. (2006b). Gender, self-employment, and earnings. The interlocking structures of family and professional status. *Gender & Society*, 20(6), 725-753.
- Cable, D.M., & Judge, T.A. (1996). Person-Organization Fit, Job Choice Decisions, and Organizational Entry. *Organizational Behavior and Human Decision processes*, 67(3), 294-311.
- Caplan, R.D. (1987). Person-Environment Fit Theory and Organizations: Commensurate Dimensions, Time Perspectives and Mechanisms. *Journal of Vocational Behavior*, *31*, 248-267.

- Caplan, R.D., & Van Harrison, R. (1993). Person-Environment Fit Theory: Some History, Recent Developments, and Future Directions. *Journal of Social Issues*, 49(4), 253-275.
- Carlsson, B., Acs, Z.J., Audretsch, D.B., & Braunerhjelm, P. (2009). Knowledge creation, entrepreneurship, and economic growth; A historical review. *Industrial and corporate change*, 18, 1193-1229.
- Carter, S. (2011). The rewards of entrepreneurship: exploring the incomes, wealth, and economic well-being of entrepreneurial households. *Entrepreneurship: Theory and Practice*, *35*, 39-55.
- Central Bureau of Statistics (NL) (2016). *Statline: Arbeidsdeelname* (English: Employment). Retreived Juli, 17, 2016 from:

 http://statline.cbs.nl/Statweb/publication/?DM=SLNL&PA=82809ned&D1=2-10,19&D2=0&D3=0-1,3-5,7-8&D4=0-1,3-4&D5=39,l&HDR=G4,G1,G3&STB=T,G2&VW=T
- Chatman, J.A. (1989). Improving Interactional Organizational Research: A Model of Person-Organization Fit. *Academy of Management Review*, *14*(3), 333-349.
- Cholotta, K., & Drobnič, S. (2001). Was macht Selbständige zufrieden? Faktoren der Arbeitszufriedenheit bei Gründern/innen. *Wirtschaftspsychologie*, *4*, 73-85.
- Chuang, A., Shen, C.T., & Judge, T.A. (2016). Development of a Multidimensional Instrument of Person-Environment Fit: The Perceived Person-Environment Fit Scale (PPEFS). *Applied Psychology*, 65, 66-98.
- Constant, A.F. (2009). Business women in Germany and their performance by ethnicity. It pays to be self-employed. *International Journal of Manpower*, 30(1/2), 145-162.
- Craig, L., Powell, A., & Cortis, N. (2012). Self-employment, work-family time and the gender division of labour. *Work, Employment and Society*, *26*, 716-734.
- Dawis, R.V. (1992). Person-environment fit and job satisfaction. In C. J. Cranny, P.C. Smith, & E. F. Stone (Eds.), *Job satisfaction* (pp. 69-88). New York: Lexington.
- Dawis, R.V., England, G. W., & Lofquist, L. H. (1964). A Theory of Work Adjustment, Minnesota Studies in Vocational Rehabilitation, XV.

- Dawis, R.V., & Lofquist, L.H. (1984). *A psychological theory of work adjustment*. Minneapolis: University of Minnesota Press.
- Dawson, C., Henley, A., & Latreille, P. (2009). Why do individuals choose self-employment? IZA discussion paper 3974.
- De Jager, E.C. (2013). ZZP Monitor. Utrecht: Myler.
- De Janasz, S., Forret, M., Haack, D., & Jonsen, K. (2013). Family status and work attitudes: an investigation in a professional services firm. *British Journal of Management*, 24, 191-210.
- Dekker, F. (2010). Opvattingen van zelfstandig ondernemers over sociale zekerheid. *Tijdschrift voor Arbeidsvraagstukken*, 26(2), 146-161.
- DeTienne, D.R. (2010). Entrepreneurial exit as a critical component of the entrepreneurial process: Theoretical development. *Journal of Business Venturing*, 25, 203-215.
- Dopfer, K., Foster, J., & Potts, J. (2004). Micro-meso-macro. *Journal of Evolutionary Economics*, 14, 263-279.
- Duncan, K.A., & Pettigrew, R.N. (2012). The effect of work arrangements on perceptions of work-family balance. *Community, Work and Family, 15,* 403-423.
- Eby, L.T., Casper, W.J., Lockwood, A., Bordeaux, C., & Brinley, A. (2005). Work and family research in IO/OB: Content analysis and review of the literature (1989-2002). *Journal of Vocational Behavior*, 66, 124-197.
- Edwards, J.A., & Billsberry, J. (2010). Testing a Multidimensional Theory of Person-Environment Fit. *Journal of Managerial Issues*, 22(4), 476-493.
- Edwards, J.R. (1991). Person-job fit: A conceptual integration, literature review, and methodological critique. *International Review of Industrial and Organizational Psychology*. 6, 283-357.
- Edwards, J.R., & Cable, D.M. (2009). The value of value congruence. *Journal of Applied Psychology*, 94(3), 654-677.

- Erez, M., & Gati, E. (2004). A Dynamic, Multi-level Model of Culture: From the Micro Level of the Individual to the Macro Level of a Global Culture. *Applied Psychology*, *53*, 583-598.
- French, J.R.P., Caplan, R.D., & Van Harrison, R. (1982). *The Mechanisms of Job Stress and Strain*. London: Wiley.
- Furnham, A. (2001). Vocational preference and P-O fit: Reflections on Hollands' theory of vocational choice. *Applied Psychology: An International Review*, *50*(1), 5-29.
- Gelderblom, O. (2004). The Political Economy of Foreign Trade in England and the Dutch Republic (1550-1640). Mimeo: Retrieved, December, 30, 2014 from:

 <a href="https://www.google.nl/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0CCEQFjAA&url=http%3A%2F%2Fwww.ibrarian.net%2Fnavon%2Fpaper%2FThe_Political_Economy_of_Foreign_Trade_in_England.pdf%3Fpaperid%3D13234630&ei=XDisVMPUGoLKOdnNgMgC&usg=AFQjCNGtIKt-Y4l2rdgoc31i1rOThp8-ZA&sig2=6PrDunc5Gu2Cws3zt-_CSg&bvm=bv.82001339,d.ZWU
- Gimenez-Nadal, J.I., & Ortega-Lapiedra, R. (2010). Self-employment and time stress: the effect of leisure quality. *Applied Economics Letters*, 17, 1735-1738.
- Gold, M. & Mustafa, M. (2013). Work always wins: client colonisation, time management and the anxieties of connected freelancers. *New Technology, Work and Employment*, 28, 197-211.
- Government of the Netherlands. (2014). *Wettekst BGL* (*legal text BGL*). Retrieved: December, 30, 2014 from:
- http://www.rijksoverheid.nl/documenten-en-publicaties/kamerstukken/2014/09/22/wettekst-bgl.html
- Gorgievski, M.J. Bakker, A.B., Schaufeli, W.B., Van der Veen, H.B., & Giesen, C.W.M. (2010). Financial problems and psychological distress: investigating reciprocal effects among business owners. *Journal of Occupational Psychology*, 83, 513-530.
- Gorgievski, M. J., Ascalon, E., & Stephan, U. (2011). Small business owners' success criteria, a values approach to personal differences. *Journal of Small Business Management*, 49(2), 207-232.

- Greenhaus, J.H., & Powell, G.N. (2006). When Work and Family Are Allies: A Theory of Work-Family Enrichment. *The Academy of Management Review*, *31*(1), 72-92.
- Hall, P.A. and Soskice, D. (2001). *Varieties of Capitalism*. Oxford, UK: Oxford University Press.
- Harris, J.I., Moritzen, S.K., Robitschek, C., Imhoff, A., & Lynch, J.L.A. (2001). The comparative contributions of congruence and social support in career outcomes. *The Career Development Quarterly*, 49, 314-323.
- Hauseman S., & Osawa M. (2003). The growth of Nonstandard Employment in Japan and the United States. In Hauseman S., & Osawa M. (Eds.) *Nonstandard Work in Developed Economies: Causes and Consequences*. W.E. Upjohn Institute for Employment Research.
- Hilbrecht, M. and Lero, D.S. (2014). Self-employment and family life: constructing work-life balance when you're 'always on. *Community, Work and Family, 17*, 20-42.
- Hinks, T., & Gruen, D. (2007). What is the structure of South African happiness equations? evidence from quality of life surveys. *Social Indicators Research*, 82, 311-336.
- Hofstede, G. (2001). *Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations*. Thousand Oaks CA: Sage Publications.
- Hofstede, G., Hofstede, G.J., & Minkov, M. (2010). *Cultures and Organizations: Software of the Mind*. McGraw-Hill.
- Holland, J.L. (1985a). *Making vocational choices: A theory of careers*. Englewood Cliffs, NJ: Prentice-Hall.
- Holland, J.L. (1985b). *Professional manual for the Vocational Preference Inventory*. Odessa, FL: Psychological Assessment Resources.
- Hughes, K. (2003). Pushed or pulled? Women's entry into self-employment and small business ownership. *Gender, Work, and Organisation*, 10(4), 433-454.
- Hundley, G. (2001). Why and when are the self-employed more satisfied with their work? *Industrial Relations*, 40, 293-316.
- Hyytinen, A., & Ruuskanen, O. (2007). Time use of the self-employed. Kyklos, 60, 105-122.

- Ikwordzzper.nl (2013). *In welke sectoren werken zzpers?* (*In which branches do own-account workers work?*) Retrieved: December, 30, 2014 from: http://www.ikwordzzper.nl/zzp-kennisbank/cijfers-en-kengetallen/in-welke-sectoren-werken-zzp-ers
- Institute for Public Policy Research (IPPR), Hatfield, I. (2015). *Self-Employment in Europe*. London: IPPR.
- Ishikawa, T., & Dejima, T. (1994). Measuring the Extent of Duality in the Japanese Labour Market, in T. Ishikawa (ed.). *The Distribution of Income and Wealth in Japan*. Tokyo: University of Tokyo Press, 169-210. (in Japanese)
- Jamal, M. (1997). Job stress, satisfaction and mental health: an empirical examination of self-employed and non-self-employed Canadians. *Journal of Small Business Management*, 35, 48-57.
- Jamal, M. (2007). Short communication: burnout and self-employment: a cross-cultural empirical study. *Stress and Health: Journal of the International Society for the Investigation of Stress*, 23, 249-256.
- Jones R.S., & Urasawa S. (2011). *Labour Market Reforms in Japan to Improve Growth and Equity, OECD*. Economics Department Working Papers, 889, OECD Publishing.
- JILPT (2012). The Japanese Economy and Labor Situation. *Labor situation in Japan and Its Analysis: General Overview 2011/2012*. Retrieved December 15, 2014 from: http://www.jil.go.jp/english/lsj/general/2011-2012/chapter1.pdf
- Kawaguchi, D., 2002. Compensating wage differentials among self-employed workers: evidence from job satisfaction scores. Discussion paper no. 568, Institute of Social and Economic Research, Osaka University.
- Keizer, A. (2013). *Unions and their representation of contingent workers: A comparative analysis of Japan, the Netherlands and the UK*. Paper presented at the 10th European ILERA conference, 20-22 June 2013, Amsterdam.
- Kennedy, M. (2005). *An integrative investigation of person-vocation fit, person-organisation fit, and person-job fit perceptions* (Doctoral dissertation). Retrieved: April 7, 2016 from: http://digital.library.unt.edu/ark:/67531/metadc4768/m2/1/high_res_d/dissertation.pdf

- Kristof, A.L. (1996). Person–organisation fit: An integrative review of its conceptualizations, measurement, and implications. *Personnel Psychology*, 49, 1–49.
- Kristof-Brown, A.L., Zimmerman, R.D., & Johnson, E.C. (2005). Consequences of individuals' fit at work: A meta-analysis of person—job, person—organization, person—group, and person—supervisor fit. *Personnel Psychology*, *58*, 281–342.
- Koike, K. (1999). *The Economics of Work*. Toyo-keizai-shimpo-sya: Tokyo, 342 p (in Japanese)
- Komoto K. (2008). *Career Change to Self-employment of Middle-aged*. NLI-Research Report 2008.2, 16-23. (in Japanese)
- Kossek, E.E., & Ollier-Malaterre, A. (2012). Work-Life Policies: Linking National Contexts, Organizational Practice and People for Multi-level Change. Chapter in: Poelmans, S., Greenhaus, J., & las Heras, M. (2012), *New Frontiers in Work-family Research: A vision for the Future in a Global World* (3-31). London: Palgrave.
- Masuda, T. (2006). The Determinants of Latent Entrepreneurship in Japan, *Small Business Economics*, 26, 227–240.
- McCann, L. (2014). Economic and Social Context: Are there varieties of capitalism? What difference does it make to employment relations?' In M. Martinez Lucio (ed.)

 International Human Resource Management: an employment relations perspective, 161-180. Sage: London.
- Meglino, B. M., & Ravlin, E. C. (1998). Individual values in organisations: Concepts, controversies, and research. *Journal of Management*, 24, 351–389.
- Milkie, M., & Peltola, P. (1999). Playing all the roles: gender and the work-family balancing act. *Journal of Marriage and the Family*, 61(20), 476-490.
- Millán, J.M., Congregado, E., & Roman, C. (2014). Persistence in entrepreneurship and its implications for the European entrepreneurial promotion policy. *Journal of Policy Modeling*, *36*, 83-106.
- Millán, J.M, Hessels, J., Thurik, R., & Aguado, R. (2013). Determinants of job satisfaction: a European comparison of self-employed and paid employees. *Small Bus Econ*, 40, 651-670.

- Molloy, J.C., Ployhart, R.E., & Wright, P.M. (2011): The Myth of "the" Micro-Macro Divide: Bridging System-Level and Disciplinary Divides. *Journal of Management*, *37*, 581-609.
- Muchinsky, P.M., & Monahan, C.J. (1987). What is person-environment congruence? Supplementary versus complementary models of fit. *Journal of Vocational Behavior*, *31*, 268-277.
- Mustafa, M., & Gold, M. (2013). Chained to my work? Strategies to manage temporal and physical boundaries among self-employed teleworkers. *Human Resource Management Journal*, 23, 413-429.
- Nesheim, T. (2003). Using external work arrangements in core value creation areas. *European Management Journal*, 21(4), 528-537.
- Office for National Statistics. (2016). Trends in Self-Employment in the UK: 2001 to 2015. www.ons.gov.uk.
- O'Reilly, C.A., Chatman, J., & Caldwell, D.F. (1991). People and Organizational Culture: A Profile Comparison Approach to Assessing Person-Organization Fit. *Academy of Management Journal*, *34*(3), 487-516.
- Ostroff, C., & Schulte, M. (2007). Multiple Perspectives of Fit in Organizations across Levels of Analysis. Chapter in: Ostroff, C., & Judge, T.A. (2007). *Perspectives on Organizational Fit*. New York: Lawrence Erlbaum Associates, 287-315.
- Ozbilgin, M.F., Beauregard, T.A., Tatli, A., & Bell, M.P. (2011). Work-life, diversity and intersectionality: a critical review and research agenda. *International Journal of Management Review*, 13, 177-198.
- Pagán, R. (2009). Self-employment among people with disabilities: evidence for Europe. *Disability and Society, 24,* 217-229.
- Parasuraman, S., & Simmers, C.A. (2001). Type of employment, work-family conflict and well-being: a comparative study. *Journal of Organisational Behavior*, 22, 551-568.
- Parsons, F. (1909). Choosing a vocation. Boston, MA: Houghton Mifflin.
- Patel, P.C. & Thather, S.M.B. (2014). Sticking it out: Individual attributes and persistence in self-employment. *Journal of Management*, 40(7), 1932-1979.

- Prime Minister of Japan and His Cabinet (2014). Outline of the Basic Policies for the Economic and Fiscal Management and Reform 2014. Retrieved December, 15, 2014 from: http://www5.cao.go.jp/keizai-shimon/kaigi/cabinet/2014/summary_02.pdf
- Prottas, D.J., & Thompson, C.A. (2006). Stress, satisfaction, and the work-family interface: a comparison on self-employed business owners, independents and organisational employees. *Journal of Occupational Health Psychology*, 11, 366-378.
- Rebick M. (2005). *The Japanese Employment System: Adapting To A New Economic Environment*. Oxford University Press: Oxford.
- Reid, L., Sutton, P., & Hunter, C. (2010). Theorizing the meso level: The household as a crucible of pro-environmental behaviour. *Progress in Human Geography*, *34*, 309-327.
- Rokeach, M. (1973). The nature of human values. New York: Free Press.
- Saarni, S.I., Saarni, E.S., & Saarni, H. (2008). Quality of life, work ability and self-employment: a population survey of entrepreneurs, farmers and salary earners. *Occupational and Environmental Medicine*, 65, 98-103.
- Sakamoto, Y. & Spinks W.A. (2008). An Analysis of the Relationship between ICT Diffusion and Deemployment in Japan. *Proceedings of the 13th International Telework Workshop*, 245-253.
- Saitoh, T., Sakamoto Y., & Spinks W.A., (2009). *Estimation of SOHO Population Using Official Labor Statistics*. Proceedings of the 11th Japan Telework Society Conference, 24-29. (in Japanese)
- Schneider, B. (1987). The people make the place. *Personnel Psychology*, 40, 437-453.
- Schneider, B., Kristof-Brown, A.L., Goldstein, H.W., & Smith, B.D. (1997). What is This Thing Called Fit? In Anderson, N., & Herriot, P. (1997), *International Handbook of Selection and Assessment*. Hichester: John Wiley & Sons.
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*, 25, 1–65.

- Sekiguchi, T. (2004). Toward a dynamic perspective of person-environment fit. *Osaka Keidai Ronschu*, 55(1), 177-190.
- Sociaal Economische Raad (SER) (2010). ONTWERPADVIES Positie zelfstandig ondernemers. Den Haag: SER.
- Souren, M. (2013). CBS-berichten. Arbeidsduur en inkomen zelfstandigen teruggelopen. *Tijdschrift voor Arbeidsmarktvraagstukken*, 29(4), 449-455.
- Statistics Bureau of Japan (2016). *Historical Statistics of Labour Force Survey*. Retrieved July 14, 2016 from: http://www.stat.go.jp/data/roudou/longtime/03roudou.htm
- Talbot, D.L., & Billsberry, J. (2010). Comparing and Contrasting Person-Environment Fit and Misfit. Paper presented at the 4th Global e-Conference on Fit.
- Tracey, T., & Rounds, F. (1993). Evaluating Holland's and Gate's vocational interest models. *Psychological Bulletin*, *113*, 229-246.
- Tuttle, R., & Garr, M. (2009). Self-employment, work-family fit and mental health among female workers. *Journal of Family and Economic Issues*, *30*, 282-292.
- Van Stel, A., & de Vries, N. (2015). The economic value of different types of solo self-employment: a review. *International Review of Entrepreneurship*, 13(2), 73-80.
- Verbiest, S., Goudswaard, A., & Van Wijk, E. (2014). De toekomst van flex: een onderzoek van TNO naar flexstrategieën van Nederlandse bedrijven (the future of flex: a research by TNO to the flex strategies of Dutch corporations). Hoofddorp: TNO Gezond Leven.
- Vinkenburg, C. J., Van Engen, M. L., & Peters P. (forthcoming). Promoting new norms and true flexibility: Sustainability in combining career and care. In A. de Vos & B. van der Heijden. *Handbook of Research on Sustainable Careers*. Aldershot, UK and Brookfield, US: Edward Elgar Publishing.
- Werbel, J.D. & Johnson, D.J. (2001). The use of person-group fit for employment selection: a missing link in person-environment fit. *Human Resource Management*, 40(3), 227-240.
- www.geerthofstede.nl (2015). *Dimension Data Matrix*. Retrieved July, 24, 2016 from: http://www.geerthofstede.nl/dimension-data-matrix Yu, K.Y.T. (2016). Inter-

relationships among different types of person-environment fit and job satisfaction. *Applied psychology: an international review, 65*(1), 38-65.

ZZP Barometer (2014). *Yearly report. Facts, numbers and trends 2013/2014*. Retrieved: December, 30, 2014 from:

http://zzpbarometer.nl/2014/02/zzp-barometer-jaarrapport-feiten-cijfers-en-trends-20132014/

Appendix

Table 1. Theoretical illustration of national (UK, Netherlands and Japan) macro contextual influences on opportunities to start working as a self-employed worker.

	United Kingdom	Netherlands	Japan
Institutional	+	++	-
Economic	0	+	+
Cultural	++	++	

⁻⁻ strong negative influence

O neither positive nor negative influence

⁻ negative influence

- + positive influence
- ++ strong positive influence

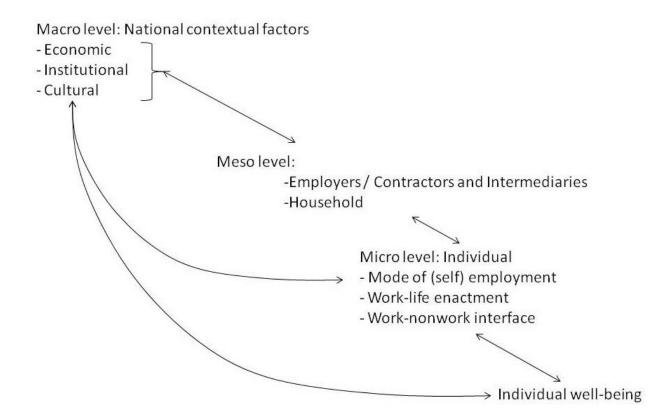


Figure 1. Interactions of Macro Level, Meso Level, and Micro Level Contextual Factors in the context of self-employed work

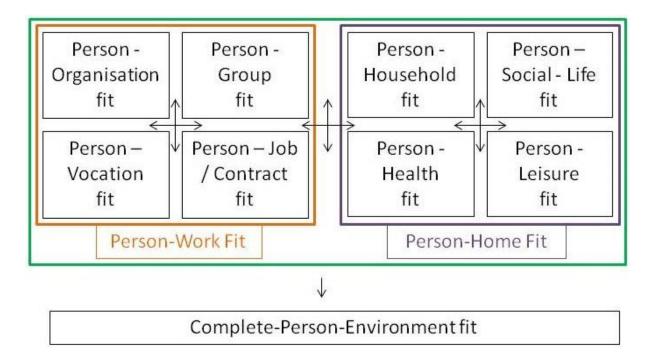


Figure 2. Conceptual model of Complete Person-Environment Fit for self-employed workers

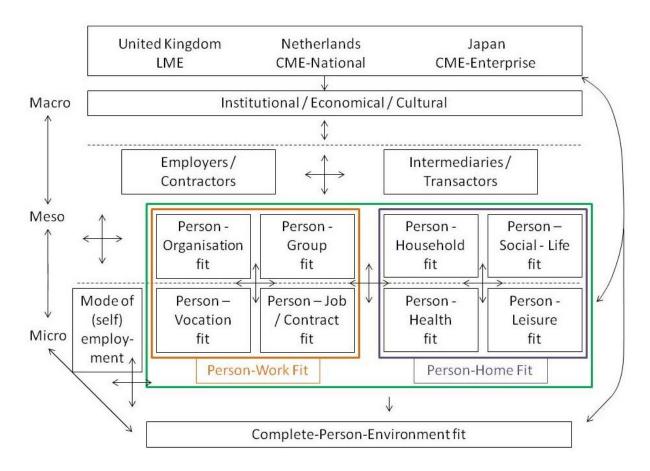


Figure 3. Complete-Person-Environment Fit Model Applied to a Multi-level Cross-National Research Design to Explain Self-Employed Workers Work-Life Interface