

## Are They Really Too Busy for Survey Participation? The Evolution of Busyness and Busyness Claims in Flanders

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As both time pressure (e.g., Gershuny 2005) and survey nonresponse (e.g., Curtin et al. 2005) increase in Western societies one can wonder whether the busiest people still have time for survey participation. This article investigates the relationship between busyness claims, indicators of busyness and the decline in survey participation in Flemish surveys conducted between 2002 and 2007. Using paradata collected during fieldwork, we investigate whether busyness related doorstep reactions have increased over the years and whether there is an empirical relationship between these busyness claims and indicators of busyness.

*Key words:* Time pressure; survey participation; paradata; doorstep reactions.

### 1. Introduction

Perceived time pressure is increasing in Western societies (e.g., Gershuny 2005; van der Lippe et al. 2006; Winslow 2005; Zuzanek 2004), although there is still a debate on whether people do now actually spend more time on (paid) work than in previous decades. When using objective measures of time pressure, usually the average number of hours spent on work, research often finds that people in Western societies tend to spend less hours on paid work and have more leisure time (e.g., Robinson and Godbey 2005a). However, when the research focus shifts to the number of hours spent on combined workloads of paid work, household chores and childcare, and to the work intensity needed for these combined demands, a different picture emerges. In that case time pressure, or more specific “combination pressure”, seems to have increased over the last decades (e.g., Jacobs and Gerson 1998; 2001; Moens 2004; Zuzanek 2004). Moreover, the feeling of the speeding up of life and subjective, personal interpretations of time pressure also lead to an increase of the experience of “busyness” (Jacob and Gerson 1998; Robinson and Godbey 2005b; Zuzanek 2004).

With all these increasing experiences of pressures and multiple demands, do surveys actually still include the (working) women and men who could be expected to be too busy or feel too busy to participate? Using survey data and call history data (paradata) of the 2002, 2005 and 2007 surveys of the Research Centre of the Flemish Government (Belgium), we try to assess whether the prevalence of busyness-related doorstep reactions

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as a reason to decline survey participation (e.g., “too busy”) has increased over the years and whether the initial use of busyness claims by respondents reflects real busyness. We do this by comparing indicators of time and combination pressure.

## 2. “Busyness” And Survey (Non)Participation

### 2.1. Busyness-Related Survey Nonparticipation

The increase of perceived time pressure seems to co-occur with an increase in survey nonresponse in the last decades in Western societies (Curtin et al. 2005; de Leeuw and de Heer 2002). In the U.S. as well as throughout Europe, response rates have been dropping. Concerning the relationship between busyness and survey participation, three hypotheses are distinguished in the nonresponse literature. A first hypothesis is “the opportunity cost hypothesis” (Groves and Couper 1998) arguing that for people who experience competing demands, such as combination pressure, the cost of survey participation is rather high and therefore they will be less likely to participate.

A second hypothesis is the “bad timing hypothesis.” This hypothesis states that people can decline participation due to temporary busyness because they just were contacted at an inconvenient time (Stoop 2007). Therefore, in contrast to chronically busy people, temporarily busy people will be likely to have time to participate at a following contact at a more favourable point in time.

The third and last hypothesis is “the Newtonian hypothesis” (“bodies in motion stay in motion”) (Stoop 2007) or “the more-more hypothesis” (Drago et al. 1998) that suggests that busy people can actually do more and therefore also participate more. This hypothesis can be linked to Robinson and Godbey’s “busy bias hypothesis” that states that respondents (in time diary studies) tend to be busier than nonrespondents (Robinson and Godbey 1997). This would imply that people who experience time or combination pressure would still somehow find time to participate and the busiest people would therefore be normally or even over-represented. This could also be caused by the fact, for instance, that people with a higher education and a busy job are used to completing forms and having multiple demands on their time, or that people with families and small children are more fully integrated in society, both possible factors behind greater survey cooperation (see for instance Stoop 2005).

When drawing on the opportunity cost hypothesis, there will be underrepresentation of busy people and this can be expected to lead to a nonresponse bias for busyness indicators. In surveys focusing on busyness, this creates a “not missing at random”-situation that leads to nonignorable conditions (Little and Rubin 2002). Such a situation also corresponds to Groves’ (2006) “survey variable cause model” in which nonresponse bias  $B(\bar{y}_r)$  can be seen as the function of both the nonresponse rate  $\bar{\rho}$  and the difference between respondents and nonrespondents on the variable of interest  $cov(\rho, Y)$  (Bethlehem 1988, Equation 1; Groves 2006).

$$B(\bar{y}_r) \approx \frac{cov(\rho, Y)}{\bar{\rho}} \quad (1)$$

The same can be true for the “bad timing” hypothesis: if people are only contacted at times at which they are busy, these temporarily busy people will also be missing from

the survey data. Systematic exclusion of the chronically and temporarily busiest people will lead to an underestimation of the population values for time and combination pressure and thus cause bias. Especially in surveys focusing on time pressure and/or the combination of work and family, such a systematic exclusion is problematic as it leads to underestimation of the very thing such surveys are trying to assess. Increased field efforts could help to recruit temporarily busy people, but may not work for the chronically busy.

Only the “Newtonian” hypothesis would predict that busy people are overrepresented in surveys. Intuitively, however, a relationship between busyness and survey nonparticipation seems very likely. Evidence for the association between time pressure and survey nonparticipation is, however, still inconclusive. Knulst and van den Broek (1998) found some indications of overrepresentation instead of underrepresentation of people who could be assumed being more busy in Dutch time budget studies when pooling all nonparticipants. This could be due to an underrepresentation of elderly people, who are generally less busy. Breeveld (2001) did not find an overrepresentation of busy people in Dutch time budget studies, while van Ingen et al. (2009) found that Dutch people who participate actively in (volunteer) work and leisure activities, such as sport, also tend to participate more in surveys. Abraham et al. (2006) also did not find support for the opportunity cost hypothesis in the American Time Use Survey. Furthermore, reports of “feeling rushed” also do not tend to differ significantly for interview respondents who refuse to keep a time diary compared with those who do keep a diary (Pääkkönen 1998), nor for nonparticipants compared to participants in time use studies (van Ingen et al. 2009), which supports the Newtonian hypothesis.

Pääkkönen (1998) did, however, find that those who refused to keep a diary report more work hours and feeling rushed at work, which is in line with the opportunity cost hypothesis. More support for the opportunity cost hypothesis was presented by Kaner et al. (1998), who found a relation between busyness and nonresponse in a mail survey: nonrespondents with a busy job or work-role overload often state that they are too busy or have no time for participating in postal surveys. Furthermore, Drago et al. (1998) found that teachers with more work stress were considerably less likely to volunteer to participate in a time diary study and those teachers who experienced time squeeze were less likely to return the time-use diary.

This demonstrates that there is some evidence that survey nonparticipation can be related to busyness and that it cannot be excluded that busyness-related nonparticipation can bias survey results. We will now focus on the relationship between busyness and one of the two major sources of nonresponse: refusals.

## 2.2. *Busyness-Related (Initial) Declinations for Survey Participation*

Nonresponse in surveys has two major sources that need to be clearly distinguished: noncontact and refusal (Groves and Couper 1998; Lynn and Clarke 2002). People become nonrespondents either because they cannot be contacted or because when having been contacted they refuse to participate. It is of course also possible that people are not able to participate because they are mentally or physically incapable, or do not speak the language.

In the 80s until the mid-90s the decrease in response rates and increase in nonresponse in American surveys was mainly due to the increase of noncontacts; from the mid-90s on, however, the increase is mainly driven by the rise in refusals (Curtin et al. 2005). Results from the European Social Survey, setting a target noncontact rate of 3%, show that very low noncontact rates are possible in many countries whereas refusal rates will vary and can be rather high (Billiet et al. 2007; Stoop et al. 2010). Using data from official statistical offices of 16 European countries, de Leeuw and de Heer (2002) also find that the increase in refusal rates varies more than the increase in noncontact rates across European countries.

The relationship between contactability and busyness is not straightforward. People with busy jobs may rarely be at home during daytime, whereas people with busy families may spend a lot of time at home and will be able to be reached by an interviewer, but may not have time to answer the questionnaire. For noncontacted sample units, even less information tends to be available than for refusing nonrespondents as no doorstep statements and reasons for nonparticipation can be registered if no contact is made. For these reasons, we will focus on the relationship between refusal and busyness, and in particular on reported reasons for refusal and indicators of busyness.

Refusals are not always irreversible, some respondents initially refuse but eventually participate at a later contact. These temporary refusers are sometimes called “initially reluctant” (e.g., Stoop et al. 2010). Initial refusers can be subdivided into those who mainly refuse for temporary reasons and who are expected to participate at a later contact, and hard refusers, whose refusal is rather outspoken or directly related to the topic or sponsor of the survey. The latter are of course more difficult to convert (although it is not impossible, see Stoop 2005).

Even if there is no downright refusal, those who cooperate can be subdivided into easy participators and negative participators. The latter utter negative reactions to the survey request and have to be persuaded by the interviewer to cooperate. Negative statements are negatively related to survey cooperation: those who use such statements are less likely to participate (Bates et al. 2008; Campanelli et al. 1997; Carton 2008; Groves and Couper 1996; Kaner et al. 1998). Time concerns or busyness statements form a distinct category of (initial) negative reactions (Maitland et al. 2009) and are often used by (initial) nonrespondents as disclaimers for survey participation (e.g., Bates et al. 2008; Carton 2008; Stoop 2007; van Ingen et al. 2009; van Loon et al. 2003). The popularity of such claims is also increasing in longitudinal studies (Laurie et al. 1999).

Evidence of a relationship between factual busyness and busyness statements as reasons for nonparticipation is rare. Couper (1997) did not find a significant relation between the number of work hours and making busyness statements. Stoop (2007) and van Ingen et al. (2009) did not find differences between respondents and (initial) refusers for feeling rushed in The Netherlands. This could suggest that busyness statements are just polite ways to refuse, as also suggested by Maynard and Schaeffer (1997). Yet Carton (2008) did find that respondents who initially made busyness statements in the Flemish “Socio-cultural changes in the Flemish region and in Brussels” surveys between 2003 and 2007 did on average have about a quarter of an hour less leisure time on a weekday.

In this study, we want to investigate the relationship between busyness claims and statements of temporary busyness of contacted sample units, indicators of busyness and

the decline in survey participation in three of the “Socio-cultural changes in the Flemish region and in Brussels” (SCV) surveys (Administratie Planning en Statistiek (APS) 2002; 2005; 2007). These three surveys were chosen because of their rich contact history data and their focus on time pressure and/or the combination of work and family through the linked ISSP-modules (see further). We will assess whether the use of busyness claims has risen over the last years, whether the respondents in the realized samples are increasingly busy and whether a factual relationship exists between the busyness claims of negative participators and indicators of busyness, such as hours spent on leisure.

### 3. Methods

#### 3.1. Data

This study uses the data and contact history instrument (CHI) data of the “Socio-Cultural Changes in the Flemish region and in Brussels” surveys SCV 2002 (APS 2002), SCV 2005 (APS 2005) and SCV 2007 (APS 2007) of the Research Centre of the Flemish Government (representing the Dutch-speaking part of Belgium). The data were collected on Dutch-speaking Belgians between 18 and 85 years old, drawn completely at random from the Belgian official population register. From 2002 on, APS started to append the modules of the International Social Survey Program (for more information see [www.issp.org](http://www.issp.org)) to the CAPI-administered SCV surveys (Carton et al. 2005). These pen-and-paper modules were given to the respondents after the CAPI interview and had to be sent back after completion through mail. The ISSP modules for 2002, 2005, and 2007 focused specifically on time pressure and/or the combination of work and family, respectively, “Family and Changing Gender Roles,” “Work Orientations III” and “Leisure Time and Sport.”

The contact strategies of the SCV surveys started with an introductory letter that was followed by attempting to contact the sample person by telephone or in a face-to-face situation (Carton et al. 2005a; Carton et al. 2005b). Every sample person had to receive at least one face-to-face visit, and after a refusal by telephone it was mandatory to visit the sample person one more time. For every call (contact attempt) and every contact a call record had to be completed on a contact form, and the doorstep reactions of sample units per contact also had to be registered on this form. The Contact History Information (CHI) forms allowed to register more than one doorstep reaction. The detailed paradata in the form of contact history data (for respondents and nonrespondents) as well as the inclusion of measures of time and combination pressure in the surveys make the datasets exceptionally suited for our study.

A limitation of using CHI data is, of course, that “the interpretation and recording of respondent questions and concerns is a subjective undertaking” (Bates et al. 2008, p. 593). Interviewers might differ in their efforts to complete the CHI after each contact attempt and respondents might differ in their intents when uttering a busyness claim. Still, by using CHI, there is at least some data on all the contacted sample units. Bates et al. (2010) illustrate that interviewers seem to be conscientious in describing their contact attempts and using CHI. Concerning the subjectivity of the reactions of the contacted sample units, some researchers suggest that doorstep statements such as “I’m too busy” could just be

polite ways of refusal (e.g., Maynard and Schaeffer 1997) and thus not express time concerns despite being registered as such. It is the aim of this article to investigate whether busyness-related doorstep statements of contacted sample units indeed reflect actual busyness.

Another limitation of the data is that until 2004, the SCV procedures involved substitution lists for replacing nonrespondents after the aforementioned contact procedures. All sample units were drawn completely at random from the Belgian official population register and grouped into the actual sample units and reserve units (three reserve addresses per actual sample unit). Because of the methodological issues arising from such a substitution procedure (see Vehovar 1999), we will only use the actual sample units of the 2002 survey.

We categorised those who explicitly refused to participate and those who were at home but did not open the door as final refusers (see Table 1). Other nonrespondents were people who could not participate for “other reasons”, because of language problems or because of illness/handicap/dementia, also people who had moved, were deceased or suspected of fraud. Being on a holiday/business trip was counted as a noncontact.

### 3.2. Operationalisation

#### 3.2.1. Busyness-related Doorstep Reactions

Thirteen different categories of negative doorstep reactions as well as nine positive/neutral ones were available on the contact form that had to be completed at every contact attempt. We will focus on the four doorstep reactions that are related to busyness. “Too busy/does not want to be disturbed” and “no time” will be considered as *busyness claims*. “Too busy/does not want to be disturbed” seems to capture two statements. Not wanting to be disturbed will be considered as a sign of bad timing, preoccupation or prioritising other activities above spending time on survey participation. We will therefore consider both statements as indicators of being too busy for participating.

These busyness claims will allow to test whether the opportunity cost hypothesis or the Newtonian hypothesis is the most appropriate. The statements “come back at another time

Table 1. Response rates for the SCV surveys

	SCV 2002	SCV 2005	SCV 2007	Total
Respondent	1,051 71.55%	1,522 64.74%	1,449 61.92%	4,022 65.29%
Refuser	180 12.25%	418 17.78%	503 21.50%	1,101 17.87%
Noncontact	74 5.04%	164 6.98%	152 6.50%	390 6.33%
Other noninterview	164 11.16%	247 10.51%	236 10.09%	647 10.50%
Total	1,469 100%	2,351 100%	2,340 100%	6,160 100%

NOTE: Chi-square all years = 62.652,  $p \leq 0.001$ ; chi-square 2002–2005 = 27.673,  $p \leq 0.001$ ; chi-square 2005–2007 = 10.319,  $p \leq 0.05$ ; chi-square 2002–2007 = 59.958,  $p \leq 0.001$ .

(in a positive tone, according to the interviewer)” and “come back at another time (in a negative tone, according to the interviewer)” will be considered as *statements of temporary busyness*, which allows us to test the bad timing hypothesis. “Waste of time” was also among the possible negative doorstep reactions. Whether this actually expresses a lack of time, however, is debatable. Therefore we will not include this doorstep reaction in our current study.

In this study we will distinguish respondents on the basis of their use of statements of (temporary) busyness: those respondents who mentioned that they lacked time or were (temporarily) busy in their initial reactions to the interviewer (and possibly expressing other negative doorstep reactions) on the one hand, and those respondents who did not mention that they lacked time or were (temporarily) busy in their initial reactions to the interviewer (although they may have given other doorstep reactions) on the other hand.

### 3.2.2. Busyness Indicators

There are several indicators of time use and time pressure in the SCV surveys. We will compare hours spent on leisure as objective indicators of busyness. For hours spent on leisure, the *number of hours free time on a week/workday* and the *number of hours free time on a weekend/nonworkday* are distinguished as objective measures of time pressure for all datasets. Subjective indicators of busyness could not be used and compared as they varied over the surveys whereas the objective indicators of busyness remained the same. We also investigate the *employment status* of the respondent (0 = paid job, 1 = no paid job) as an indicator of objective busyness.

We include the socio-demographic variables sex, age, cohabitation with a partner and having children. Sex (0 = male, 1 = female) is an important control variable since time pressure and combination pressure, as a specific form of time pressure, tend to be more common among women than among men (Eby et al. 2005; Mattingly and Sayer 2006). In Flanders, the increase in busyness is mostly caused by the increase in combined workloads of work and family (Moens 2004). Therefore we also distinguish whether the respondents have *children*, as having children is also clearly associated with having more combination pressure (e.g., Hoffman and Youngblade 1999). Further, *having a partner* is taken into account, as support of partner can reduce time and combination pressure (e.g., Grzywacz and Marks 2000).

### 3.3. Analysis

First, we assess whether the use of negative doorstep reactions, and more specifically those related to busyness, has intensified between 2002 and 2007. We also investigate whether the respondents in the realized samples are increasingly busy. If busyness has indeed increased, this should be noticeable in an increase in the number of busyness claims and statements of temporary busyness – if the latter are not mere polite ways to decline participation. SPSS 18 (PASW Statistics 18) is used for this research aim.

Second, we investigate whether the respondents who mentioned time constraints on the doorstep are actually busier than those who did not have such busyness related claims. Given that interviewers might differ in their efforts to contact respondents and fill in the contact history forms, we use two-level logistic regression in HLM 6 (Raudenbush et al.

Table 2. Evolution of busyness-related doorstep reactions among sample units

	SCV 2002	SCV 2005	SCV 2007	Chi <sup>2</sup> 2002–2005	Chi <sup>2</sup> 2005–2007	Chi <sup>2</sup> 2002–2007
Negative doorstep statements	24.30%	28.92%	30.13%	9.764**	0.817	15.234***
Busyness claims	10.55%	12.12%	13.76%	2.190	2.794	8.485**
Temporary busyness	8.37%	9.83%	10.26%	2.269	0.241	3.713 <sup>°</sup>
All busyness claims	16.61%	19.99%	21.67%	6.803**	1.996	14.578***

<sup>°</sup>  $p = 0.054$  – \*  $p \leq 0.05$  – \*\*  $p \leq 0.01$  – \*\*\*  $p \leq 0.001$ .

Busyness = “too busy” and/or “no time”.

Temporary busyness = “come back later” (with positive and/or negative intonation).

2004) with full maximum likelihood estimation of Bernoulli models with Laplace integration to allow to take possible interviewer effects into account when estimating the odds of making busyness claims with objective and subjective indicators of busyness. These odds will be estimated for the three surveys combined.

#### 4. Results

A significant increase can be noticed in final refusal rates (Table 1), in the share of sample units with negative doorstep statements and, more specifically, in the percentage of sample units with time concerns over the three SCV surveys (Table 2). Both the percentage of sample units stating that they “have no time” and/or “are too busy” (busyness claims) and the percentage stating the interviewer should “come back another time” (statements of temporary busyness) significantly increase between 2002 and 2007. Interestingly, the percentage of sample units uttering negative doorstep statements, and more specifically busyness claims, that eventually participate in the surveys decreases significantly over the years (Table 3). This seems to indicate that also in Flanders sample units with negative doorstep statements are less likely to eventually participate in surveys. Sample units with busyness claims are less likely to eventually participate than those with statements of temporary busyness, which seems to indicate that statements of temporary busyness could indeed indicate an inconvenient timing of the survey request rather than chronic busyness.

Parallel with this increase in busyness claims and statements of temporary busyness among the sample units and the decrease of sample units with such doorstep reactions eventually participating, an increase in busyness can be noticed among the respondents.

Table 3. Evolution of busyness-related doorstep reactions among respondents

	SCV 2002	SCV 2005	SCV 2007	Chi <sup>2</sup> 2002–2005	Chi <sup>2</sup> 2005–2007	Chi <sup>2</sup> 2002–2007
Negative doorstep statements	15.32%	13.73%	12.08%	1.271	1.806	5.502*
Busyness	5.71%	5.26%	4.21%	0.248	1.798	2.972
Temporary busyness	9.99%	11.10%	12.28%	0.810	1.003	3.193 <sup>°</sup>
All busyness claims	13.80%	14.98%	14.91%	0.703	0.003	0.608

<sup>°</sup>  $p = 0.07$  – \*  $p \leq 0.05$  – \*\*  $p \leq 0.01$  – \*\*\*  $p \leq 0.001$ .

Busyness = “too busy” and/or “no time”.

Temporary busyness = “come back later” (with positive and/or negative intonation).

Table 4. *Socio-demographics and evolution of objective busyness indicators among respondents*

	Mean/% 2002	Mean/% 2005	Mean/% 2007	Chi <sup>2</sup> /t 2002–2005	Chi <sup>2</sup> /t 2005–2007	Chi <sup>2</sup> /t 2002–2007
Leisure week/work day	3.669	3.494	3.589	1.559	–0.877	0.646
Leisure weekend/ non-work day	6.963	6.521	6.273	2.917**	1.939°	4.291***
Paid work (yes)	57.66%	57.23%	54.18%	0.048	2.803	2.680
Workhours	38.826	39.504	39.663	–0.983	–0.238	–1.147
Children (yes)	66.03%	65.90%	68.88%	0.003	2.854	2.024
Sex (male)	49.28%	49.67%	50.45%	0.038	0.150	0.285

°  $p = 0.053$  – \*  $p \leq 0.05$  – \*\*  $p \leq 0.01$  – \*\*\*  $p \leq 0.001$ .

Table 4 shows that the realised samples have significantly less free time on nonwork days over the years. These samples also have fewer respondents with a paid job; but among the respondents who do work, an increase in work hours can be noticed, although these work-related differences are not statistically significant. The increase in busyness throughout Western societies can thus also be seen among the respondents over the SCV surveys.

Is this co-occurring decrease in leisure time and increase in the number of statements of (temporary) busyness coincidental or is there truth behind the time concerns of respondents? Table 5 shows that those respondents who have less free time on work/week days are indeed significantly more likely to have busyness claims, even when controlling for interviewer effects, employment status as indicator of objective busyness and socio-demographic variables. No interviewer effects were found, except for the significant variance component for the intercept in the first model for claims of temporary busyness

Table 5. *Two-level logistic regression for predicting busyness claims with objective indicators of busyness, controlling for interviewer effects*

Busy	Model 1				Model 2			
	Odds ratio	Sig.	Random component	Sig.	Odds ratio	Sig.	Random component	Sig.
<i>Level 1 predictors</i>								
Intercept	0.075	***	1.566	n.s.	0.069	***	1.072	n.s.
Free time work day	0.965	**	0.032	n.s.	0.983	°	0.003	n.s.
Free time nonwork day	1.009	n.s.	0.019	n.s.	1.007	n.s.	0.021	n.s.
Paid job					1.332	***	0.454	n.s.
Age					1.003	n.s.	0.000	n.s.
Sex					1.251	***	0.106	n.s.
Cohabiting					0.907	n.s.	1.014	n.s.
Children					0.997	n.s.	0.542	n.s.
<i>Level 2 predictors</i>								
SCV 2002					206.789	n.s.		
SCV 2005					1.105	n.s.		
N level 1	3,977				3,545			
N level 2	300				123			

°  $p = 0.076$  – \*  $p \leq 0.05$  – \*\*  $p \leq 0.01$  – \*\*\*  $p \leq 0.001$ .

Table 6. Two-level logistic regression for predicting claims of temporary busyness with objective indicators of busyness, controlling for interviewer effects

Tempbusy	Model 1				Model 2			
	Odds ratio	Sig.	Random component	Sig.	Odds ratio	Sig.	Random component	Sig.
<i>Level 1 predictors</i>								
Intercept	0.166	***	1.740	*	0.203	***	86.037	n.s.
Free time work day	0.993	n.s.	0.000	n.s.	0.981	n.s.	0.001	n.s.
Free time nonwork day	0.995	n.s.	0.002	n.s.	0.998	n.s.	0.005	n.s.
Paid job					1.126	n.s.	0.071	n.s.
Age					1.001	n.s.	0.000	n.s.
Sex					1.014	n.s.	0.102	n.s.
Cohabiting					0.930	n.s.	0.409	n.s.
Children					1.020	n.s.	0.200	n.s.
<i>Level 2 predictors</i>								
SCV 2002					5.205	n.s.		
SCV 2005					0.094	n.s.		
N level 1	3,977				3,545			
N level 2	300				125			

\*  $p \leq 0.05$  – \*\*  $p \leq 0.01$  – \*\*\*  $p \leq 0.001$ .

(Table 6). After controlling for the survey years, job status and socio-demographic variables, the significance level for the effect of free time on work/week days decreases ( $p = 0.076$ ) but it still goes in the expected direction. The effects of having less leisure time on making statements of temporary busyness, although not statistically significant, also go in the expected direction (Table 6). These results show that the opportunity cost hypothesis and the bad timing hypothesis seem to apply to the SCV surveys.

Table 5 also shows that female respondents and respondents who have a paid job are significantly more likely to make busyness statements. Table 6 shows similar results for those respondents who made statements of temporary busyness, although again not statistically significant. These results are in line with the literature on time and combination pressure: those having a job are those who can experience combination pressure next to time pressure. Women are also known to be more likely to experience time and combination pressure.

## 5. Discussion

The aim of this study was to determine whether the proclaimed increase in time and combination pressure in Western societies affects survey participation by investigating busyness claims (“too busy”, “have no time”) and statements of temporary busyness (“come back at another time”) as statements to decline survey participation. We found that these busyness-related doorstep reactions increased significantly from 2002 in the investigated SCV surveys in Flanders (APS 2002; 2005; 2007) and that the use of such reactions seems to be associated with a higher likelihood of also being a final refuser in these Flemish surveys. Moreover, we found that there is truth in these busyness claims:

respondents with less free time are significantly more likely to state they are too busy or have no time, even after controlling for other indicators of time and combination pressure such as employment status and having children.

These results suggest that when sample units claim they are too busy or have no time, it can be a genuine signal of busyness that needs to be taken into account in order to try to find a more suitable moment for participation in data collections. It also indicates that for these “converted” initial negative participators with busyness claims in the SCV surveys, the Newtonian hypothesis could be the most fitting: although they seem to be genuinely more busy, these busy sample units still somehow find the time to participate anyway if a more convenient moment is found. As no significant effects of time pressure on statements of temporary busyness are found, it is also likely that respondents with initial statements of temporary busyness were indeed temporarily busy at the moment of the survey request but participated at a more convenient moment rather than experiencing chronic busyness.

For the final refusers who also had busyness claims and were eligible sample units in the data collections there is, of course, no information for the indicators of busyness to test. Even less information is available for noncontacted sample units. What is obvious is that the final refusers could not be convinced to participate after all. About 44% of the final refusers had busyness claims. If there is truth in their busyness claims as well, final refusers could be those sample units for whom the opportunity cost hypothesis applies: for those respondents with a busy life survey participation can be too much of a burden and therefore they do not participate. In that case, the surveys would be missing sample units who experience more time and/or combination pressure and hence, the survey estimates for these indicators of busyness would be underestimated. Especially in surveys focusing on time use, on work, or on the balance between work and private life, this would cause a nonresponse bias caused by the very topic they are investigating. And a “survey variable cause model” (Groves 2006) would imply a “not missing at random”-situation that leads to nonignorable conditions (Little and Rubin 2002). As the topics of time and combination pressure are important in several research disciplines as well as for policy, awareness of possible nonresponse biases is needed.

Of course, determining whether the busyness claims of these final refusers also reflect actual busyness was not possible, as survey variable data regarding all nonrespondents – thus also of the noncontacted sample units – was obviously missing, as it is the case in the vast majority of surveys. To investigate whether there is truth in the busyness claims of final refusals, future research could use a basic questionnaire design (e.g., van Ingen et al. 2009) or the “Pre-Emptive Doorstep Administration of Key Survey Items” method (PEDAKSI-method, see Lynn 2003) to measure indicators of busyness of final refusers. Future research should take more subjective indicators of busyness into account as well, such as more straightforward indicators of subjectively experienced combination pressure. Additionally, future research should take the perception of the burden of survey participation into account since Singer and Presser (2007) suggest that it could be the perception of the burden rather than the objective burden that people connect to survey participation that influences nonparticipation.

As our analysis of the busyness claims and statements of temporary busyness among the respondents showed that there can be truth to such claims, we suggest that future research

should take these claims more into account during the fieldwork process as they cannot be discarded as polite ways of refusing instead of accurate statements of busyness. Interviewers can be instructed to use a more varied contact pattern and/or increase the number of contact attempts when busyness claims as (initial) reason for nonparticipation are registered for a sample unit. They can also be instructed to use more conversion techniques, such as emphasising the social importance of survey participation or offering a small amount of money, as survey participation can be experienced as an opportunity cost among busy sample units – an opportunity cost that might need to be compensated for.

## 6. References

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