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A Tale of Two Single-Mothers: Understanding the Impact of Handicap through the Use of Diaries

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Abstract

Disabled people, being deprived of economic activities, may nevertheless engage in non-economic activities within the household, especially in extended family households in poor countries. These may include looking after children. Thus, there may be a close relationship between human, physical and financial resources and consumption, production and investment activities of the household, as suggested by the Household Economic Portfolio model (Chen and Dunn 1996). Among the poor, single mothers are particularly vulnerable, although many are quite resistant. We are looking at understanding whether disabled single mothers are more vulnerable. We have adopted a case study approach because the methodology that we have adopted, the use of diaries, is difficult to analyze. The study of the poor through financial diaries is not new (Collins et al. 2010). However, we have gone a step further and used financial and time diaries. Our findings show that the combining of the two kinds of diaries has led to considerable insights on how a handicap not only limits the income, but also forces one to consumption patterns of time and money which are different.

Keywords: *Poverty, Handicap, Time, Money, Human Capital, Financial Capital, Physical Capital, Combined Diaries*

1. Introduction

"The international development community is beginning to recognize that people with disabilities constitute among the poorest and most vulnerable of all groups, and thus must be a core issue in development policies and programs. Yet the relationship between disability and poverty remains ill-defined and under-researched, with few studies providing robust and verifiable data that examine the intricacies of this relationship." (Groce et al. 2011).

It is not only academics which realize this. There is a United Nations Convention on the Rights of Persons with Disabilities (CRPD). Article 31 of the CRPD explicitly recognizes the need for statistical and research data, to formulate and implement policies. This paper is a step in that direction.

Extant research shows a two-way relationship between disabilities and poverty (Trani and Loeb 2012), some papers focus on how disabilities create poverty and others on how poverty reinforces disabilities (Groce et al. 2011). Disabilities create a lack of access to education, to adequate housing, to enough nutritious food, clean water and basic sanitation, to health care and to credit. Poverty also creates a lack of access to all these. Therefore, the cost of each of these is much higher for the deprived poor. This in turns reinforces their lower productivity inherent in their disability.

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Disabled people, being deprived of economic activities, may nevertheless engage in non-economic activities within the household, especially in extended family households in poor countries. These may include looking after children. Thus, there may be a close relationship between human, physical and financial resources and consumption, production and investment activities of the household, as suggested by the Household Economic Portfolio model (Chen and Dunn 1996). However, there is little research done on how poor people with disabilities pass their time and what they consume with their limited means. Such research is important not only for public policy, development researchers and donors, but also for big business that is following the bottom of the pyramid marketing advocated by Prahalad (2006).

Among the poor, single mothers are particularly vulnerable, although many are quite resistant. We are looking at understanding whether disabled single mothers are more vulnerable. We have adopted a case study approach because the methodology that we have adopted, the use of diaries, is difficult to analyze. The study of the poor through financial diaries is not new (Collins et al. 2010). However, we have gone a step further and used financial and time diaries. We want to see if the combined use of both kinds of diaries can give richer insights into the lives of the poor and how they manage them.

2. Literature Review

The relationship between poverty and disability is disputed. Most find that disability leads people to situations of poverty (Buddelmeyer and Verick 2008, Palmer et al. 2012). However, based on survey data collected in Afghanistan and Zambia, Trani and Loeb (2012) found that disability is not related to poverty in terms of financial assets: disability may be as often in rich people as in the poor. However, most researchers do find that poverty as well as disabilities impact access to education and employment (Buddelmeyer and Verick 2008, Trani and Loeb 2012, Palmer et al. 2012). Researchers also found that disability leads to people being single (Trani and Loeb 2012) and that becoming single may lead to poverty (Buddelmeyer and Verick 2008).

Evidence from Bangladesh suggests that disabled people are deniedaccess to social networks and microfinance (Foley and Chowdhury 2007). Disabled people have better access to informal microfinance rather than to formal microfinance (Beisland and Mersland 2012). However, the access to microfinance is higher for educated people. Although studies of access to microfinance and links with socio-economic categories are common, Beisland and Mersland (2012) find that there is a need for studies which relate the impact of microfinance on the self-esteem and general integration of poor people.

3. Methodology

One of the researchers went to Cairo, Egypt,in the summer of 2031 to collect financial and time-use diaries. The researcher spoke Egyptian but was accompanied, at all times, by an Egyptian lawyer who volunteered to assist him in the research. These financial diaries and time-use diaries were collected over a fourteen-day period in summer 2013. Image-1 shows an example page of the financial diary, and image-2 shows an example of the time-use diary.

The two diarists, whose diaries we analyze in this paper, live in one of the very poor neighborhoods in Cairo. Both are single mothers with adult children, some of who are still living them. Before selecting the diarists, we asked whether they had ever taken a microcredit. Both of them have been borrowers from microfinance institutions. This criterion we used for identifying the participants doesn't necessarily mean that the diarist was a borrower at the time of the study (but certainly she had been before).

The diaries were non-stylized:the two women were asked to fill the diary sheets using the wording they like. They reported all the financial transactions and all the events on which their time was spentduring these 14 days. For the time diaries, each day was divided into 48 slots of 30 minutes each and the diarist was asked to report the principal activity during that time.

The role of the researcher was to check for the accuracy of the diaries by visiting the diarists three to five times

during the period of the study. After the diaries were collected, all the reported information was entered into an excel sheet for each person. Stylizing the fields was done afterwards in order to provide a global report at the end on how the time and money of the two women was spent. While building a report on the time-use diary was difficult (because of the need for rewording and categorizing the diarist's activities), the mission was easier for the financial diary because similar items of expenditure recurred. However, unlike the time-use diary, in the financial diary special attention was required in order to differentiate between the cash and accrual financial transactions.

We refer to our two participants by mentioning only their first names in order to respect their anonymity while keeping the paper personalized at the same time. The first woman, Salwa, was 52 years old at that time. She is a retired housewife, who used to work as a servant in a hospital and to provide house-servicing activities for rich families. Unfortunately, Salwa is now a sick person who suffers from an illness in her knees and cannot do much physical work.She is a single mother (widow) with two sons (aged 31 and 27) and two daughters (aged 26 and 21). Her main source of income is from charityreceived from people who know about her situation andtransfer payments from some of her children. In addition, she occasionally provides some services as cleaning carpets for the neighbors. Her children are still living with her as one son and one daughter are divorced. The old son works as a baker, the others are unemployed and work occasionally in temporary jobs. The second diarist is called Azza, a 46 year-old widow who works as a tailor at home. Part of her work as a tailor is for a cooperative from where she gets a monthly salary. She has three daughters (aged 29, 27, and 24) and two sons (aged 22 and 16). Some of her younger children are unemployed and still living with her.

4. The Two Diaries of Salwa

In this section, we report and analyze the diaries of Salwa starting with the financial diary and followed by the time-use diary. Thereafter, we analyze the joint diary, which we built by combining the financial and time-use information of the participant.

4.1 Financial Diary

Salwa's diary started on the 16th of July 2013. Table 2 shows a summary of the two-week financial diary. The maximum income on any day is 70 EGP. The diarist got this amount on July 16 and on July 27 as well. The first day's income included receipt from the researcher (50 EGP) for keeping the diaries and from charity (20 EGP). On the second day, the younger daughter generated the income by washing carpets. Another 20 EGP came from washing carpets on another day by Salwa. Other different amounts of charity were received during the period (30, 20, 20 and 17.5 EGP). One must keep in mind that the study happened during the Muslims' holy month of Ramadan (the fasting month), which justifies the frequent receipt of charity. On July 19, she borrowed 45 EGP from a friend. On other days, she borrowed lower amounts from others (40, 25, 16, 15, and 20 EGP). The rest of the inflows came from the researcher (40 and 13 EGP) and from the children. The Table 1 shows the totals of Salwa's inflows during the period classified by the source of income:

Table 2 shows as well the purchases on credit on many days. The largest amount ever spent was 100 EGP was for buying a fan which is the only investment in physical capital we can find in her diary.

Concerning the expenses of this diaries, we see from Table 3 that almost 60% of the outflows is on food, 13% for buying the fan, 8% for the repaying some of the microloans borrowed from friends, almost 7% was spent on medicines, 6% were given to her grandchildren, and the rest were paid for transport, cleaning materials and buying a lighter. All these expenses amount to 780 EGP that is 187 EGP more than the total income of Salwa during the period (without having any savings as

Table 1. Salwa's income during the two weeks

Source of income	EGP	Percentage
Charity	107,50	18%
Researcher	103,00	17%
Children	111,50	19%
Carpet washing	90,00	15%
Borrowing	161,00	27%
Found in the street	20,00	3%
Total	593,00	100%

Table 2. Cash flow statement of Salwa based on her financial diary

Salwa(EGP)				
Day	Inflow	Ouflow	Balance	On credit
Jul-15			0,00	
Jul-16	70,00	52,00	18,00	
Jul-17	44,50	62,50	0,00	
Jul-18	36,00	60,50	1,25	25,75
Jul-19	45,00	54,25	2,00	10,00
Jul-20	0,00	18,75	2,00	18,75
Jul-21	35,00	32,00	5,00	
Jul-22	47,50	8,00	44,50	
Jul-23	65,00	73,00	36,50	
Jul-24	10,00	68,50	0,00	22
Jul-25	40,00	38,00	2,00	
Jul-26	40,00	39,00	3,00	
Jul-27	70,00	84,00	0,50	11,50
Jul-28	40,00	40,50	0,00	
Jul-29	50,00	149,00	1,00	100,00
Total	593,00	780,00	1,00	188,00

Table 3. Total expenses of Salwa based on her financial diary

Total for 14		
Outflows	days(EBP)	Percentage
Food	462,25	59,3%
Fan	100,00	12,8%
Debt Repayment	62,25	8,0%
Medicine	52,00	6,7%
Children/Grandchild	47,50	6,1%
Transport	28,00	3,6%
Cleaning Materials	26,50	3,4%
Lighter	1,50	0,2%
Total	780,00	100,0%

an opening balance for the first day). This was possible only because of the facility of buying on credit that Salwa uses for smoothening her consumption.

4.2 Time Use Diary

The time use diaries in Table 4 show why the person is poor. Only 1% of her time was spent on income generating activity which is carpet washing. Her illness does not allow here to work. This also justifies spending 36% of her time on watching TV (keeping in mind that this was the Ramadan period, the season of the most interesting TV series of the year and that many political

Table 4. Time-use diary of Salwa

All figures in hours		Total		16-Jul	17-Jul	18-Jul	19-Jul	20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul	27-Jul	28-Jul	29-Jul	Mean
Maslow's hierarchy	Description of activity																	
Physiological	Sleeping	**112,5**	33,5%	8,0	6,0	5,5	8,0	6,5	6,5	12,0	8,5	6,0	8,0	8,0	12,0	9,5	8,0	**8,0**
Physiological	Preparing food	**14,5**	4,3%		1,0	3,0		3,0	0,5					3,0	0,5	3,0	0,5	**1,0**
Physiological	Eating	**14,5**	4,3%	1,0	1,0	1,0	1,5	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	**1,0**
Physiological	Resting	**1,0**	0,3%														1,0	**0,1**
Physiological	Waking, idling in bed	**1,5**	0,4%	0,5	0,5				0,5									**0,1**
Safety	Shopping	**6,0**	1,8%		1,0	1,0	0,5						0,5	2,5		0,5		**0,4**
Safety	Working	**3,0**	0,9%			3,0												**0,2**
Safety	Meeting the researcher	**1,0**	0,3%								1,0							**0,1**
Safety	Watching TV	**121,5**	36,2%	9,5	6,0	9,0	7,5	10,5	15,5	6,0	9,0	9,5	11,5	7,5	7,5	5,0	7,5	**8,7**
Safety	Going to the doctor	**1,5**	0,4%			1,5												**0,1**
Safety	Cleaning	**5,0**	1,5%		1,0		4,0											**0,4**
Love, belonging	Meeting friends in street	**22,5**	6,7%	2,5						5,0	3,0	1,0				5,0	6,0	**1,6**
Love, belonging	Visiting relatives	**12,5**	3,7%	1,5	7,5		2,5	1,0										**0,9**
Love, belonging	playing with grandchildren	**5,0**	1,5%					1,0			1,5	2,5						**0,4**
Love, belonging	Time with the family	**13,0**	3,9%					1,0				4,0	3,0	2,0	3,0			**0,9**
Love, belonging	Receiving guests	**1,0**	0,3%	1,0														**0,1**
		336,0	100,0%	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	**24,0**

unrests were happening during the same period, thus creating attention-gripping stories). Salwa has used 7% of the time for meeting friends and neighbors. We have classified the activities according to Maslow's (1943) pyramid of needs.

The non-income generating activity of Salwa include spending time with her children and grandchildren which can be considered in her case as baby-sitting as she has a divorced son and daughter. If we combine all the time spent for the family we find that 5.5% of the 336 hoursis used. Overall, by combining this potentially economic activity with the time spent on work, we find that they make up 6% of Salwa's life. On the other side, the consumption activity of TV watching (using the physical asset of TV) constitutes the majority of time awake of this woman.

4.3 Joint-Diary

We try here to find out if any further insights can be obtained by looking at the two diaries at the same time. Table 5 represents the combined diary of Salwa. Looking at this combination, the main remark is that Salwa spends a lot of time meeting friends. Even though she doesn't meet her friends everyday; once they meet they take their time. On the financial side, we have already remarked on the use of microloans from friends. Possibly, Salwa's time investment in meeting friends is justified by building trust that allows her to get microloans from them. In addition, the consumption activity of watching TV a lot might be justified by enriching the human capital of Salwa by making her informed all the time about what's is happening in her country and having interesting stories to share from what she learns on TV. The researcher who visited this woman found her an interestingly talkative woman.

In other words, although she didn't (and couldn't as well because of her illness) work, Salwa has invested in her time in her human capital and used it for building a good social network that helped her get microloans as well as charity which feed the financial capital of her economic portfolio. The income that Salwa gets from her children, aid, and work allows her to pay back the microloans she takes.

5. The Two Diaries of Azza

5.1 Financial Diary

Table 7 tells about the financial life of Azza who started the period with savings of 150 EGP. The most remarkable amount of inflows came on the 3rd of August when she got her salary (680 EGP) from the cooperative where she works. All the other inflows came also from her work at home on her sewing machine. Exceptionally, on August 9, Azza got a present of 100 EGP from her brother for the period of Eid. From the researcher, she earned 40 and 60 EGP that contributed to her inflows. In Table 6, we see the three sources of inflows.

From Table 8 the distribution of the Azza's outflows shows a new element in her financial diary that is the repayment of microloans. 22% of her expenses were on repaying loans that she borrowed from an MFI. She has also spent on the education of her son. The tuition fees compose 20% of the total outflows of the two-week study period. She has invested also 10% in buying different sewing materials, 7% as pocket money for her younger children and 5% for buying cloths (especially because of the Eid event). The spending on sewing material represents Azza's investment in physical capital, which will be later used for generating income through her work on her sewing machine.

5.2 Time-use Diary

As we can see in Table 9 that summarized the use of time during the two weeks, almost 12% of the time is spent on praying and the same amount on cleaning. After those two important amounts of time, 11% of the 336 hours were used on working. It is important to refer here to the issue that Ramadan is an important month during which the Muslims spend more time than usual on praying and Quran reading. We find the time spent on cleaning remarkable, spending almost 3 hours per day is quite important. This can be again justified by the importance of Eid period where relatives and friends visit each other. This is why we classified the mania for cleaning of Azza under the Maslow category of 'esteem' instead of 'security'/'Safety'(which includes the essential cleaning works). The time spent on working, however, is not surprising as Azza is a breadwinner of her family

Table 5. Combined time-use and financial diary of Salwa

All figures in hours	16-Jul	17-Jul	18-Jul	19-Jul	20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul	27-Jul	28-Jul	29-Jul
Description of activity														
Sleeping	8,0	6,0	5,5	8,0	6,5	6,5	12,0	8,5	6,0	8,0	8,0	12,0	9,5	8,0
Preparing food		1,0	3,0		3,0	0,5					3,0	0,5	3,0	0,5
Eating	1,0	1,0	1,0	1,5	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0
Resting														1,0
Waking, idling in bed	0,5	0,5				0,5								
Shopping		1,0	1,0	0,5						0,5	2,5		0,5	
Working			3,0											
Meeting the researcher								1,0						
Watching TV	9,5	6,0	9,0	7,5	10,5	15,5	6,0	9,0	9,5	11,5	7,5	7,5	5,0	7,5
Going to the doctor			1,5											
Cleaning		1,0		4,0										
Meeting friends in street	2,5						5,0	3,0	1,0				5,0	6,0
Visiting relatives	1,5	7,5		2,5	1,0									
playing with grandchildren					1,0			1,5	2,5					
Time with the family					1,0				4,0	3,0	2,0	3,0		
Receiving guests	1,0													
	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0
Inflow (EGP)	70,00	44,50	36,00	45,00	0,00	35,00	47,50	65,00	10,00	40,00	40,00	70,00	40,00	50,00
Ouflow (EGP)	52,00	62,50	60,50	54,25	18,75	32,00	8,00	73,00	68,50	38,00	39,00	84,00	40,50	149,00
On credit (EGP)			25,75	10,00	18,75				22			11,50		100,00
Balance (EGP)	18,00	0,00	1,25	2,00	2,00	5,00	44,50	36,50	0,00	2,00	3,00	0,50	0,00	1,00

Table 6. Azza's income during the two weeks

Source of Income	EGP	Percentage
Work	1300	86,67%
Researcher	100	6,67%
Present from the brother	100	6,67%
Total	1500	100,00%

Table 7. Cash flow statement of Azza based on her financial diary

Azza(EGP)			
Day	Inflow	Ouflow	Balance
Jul-29			150,00
Jul-30	68,00	217,00	1,00
Jul-31	40,00	38,00	3,00
Aug-01	100,00	36,00	67,00
Aug-02	30,00	26,00	67,00
Aug-03	680,00	729,00	22,00
Aug-04	175,00	100,00	97,00
Aug-05	70,00	20,00	147,00
Aug-06	60,00	175,00	32,00
Aug-07	112,00	96,00	48,00
Aug-08	25,00	36,00	37,00
Aug-09	140,00	70,00	107,00
Aug-10	0,00	15,00	92,00
Aug-11	0,00	17,00	75,00
Aug-12	0,00	32,00	43,00
Total	1500,00	1607,00	43,00
Daily	average	107,14	114,79

Table 8. Total expenses of Azza based on her financial diary

Total for 14		
Outflows	day(EBP)	percentage
Food	481,00	29,9%
Debt Repayment	361,00	22,5%
Tuition fees	325,00	20,2%
Materials for work	164	10,2%
Children/ grandchild	112,00	7,0%
Clothes	85,00	5,3%
Cleaning Materials	37,00	2,3%
Transport	36,00	2,2%
Lamp	5,00	0,3%
Medicine	1,00	0,1%
Total	1607,00	100,0%

and some of her children are totally dependent on her. Nevertheless, the Eid period and the long fasting days of Ramadan during summer time reduce the usual amount of time spent on working.

Table 9. Time-use diary of Azz.

All figures in hours		Total		30-Jul	31-Jul	01-Aug	02-Aug	03-Aug	04-Aug	05-Aug	06-Aug	07-Aug	08-Aug	09-Aug	10-Aug	11-Aug	12-Aug	Mean
Maslow's hierarchy	Description of activity												Eid	Eid	Eid			
Physiological	Sleeping	**117,0**	34,8%	5,5	5,0	7,0	8,5	9,0	7,5	12,5	5,5	5,5	15,0	7,5	10,5	9,0	9,0	**8,4**
Physiological	Preparing food	**19,0**	5,7%	2,5	0,5	1,0	0,5	0,5		0,5	6,5	0,5	2,5	2,0		2,0		**1,4**
Physiological	Eating	**10,0**	3,0%	1,0	1,0	1,0	1,0	1,5	0,5	0,5	1,0	0,5		1,0		0,5	0,5	**0,7**
Physiological	Resting	**5,0**	1,5%		3,5					1,0	0,5							**0,4**
Physiological	Waking, idling in bed	**6,5**	1,9%	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5		0,5	0,5	0,5	0,5	**0,5**
Safety	Shopping	**16,5**	4,9%	5,0	1,0	1,5	1,5		1,5		3,5					2,0	0,5	**1,2**
Safety	Working	**38,5**	11,5%		1,0	5,5	2,0	2,5			3,5	3,5	6,0		2,5	3,0	9,0	**2,8**
Safety	Meeting the researcher	**1,0**	0,3%	1,0											1,5			**0,1**
Safety	Watching TV	**6,5**	1,9%	2,0	0,5							0,5				2,0		**0,5**
Safety	Awakening the son	**2,5**	0,7%		1,0	0,5	0,5					0,5						**0,2**
Safety	Going to the school of the son	**3,0**	0,9%					3,0										**0,2**
Love, belonging	Time with the family	**10,0**	3,0%	1,0	0,5									8,5				**0,7**
Love, belonging	Meeting friends in street	**6,5**	1,9%		1,5			1,5									3,5	**0,5**
Love, belonging	Visiting relatives	**13,0**	3,9%						13,0									**0,9**
Esteem	Cleaning	**41,5**	12,4%	2,0	3,0	2,5	2,0	1,0	0,5	7,0	1,5	10,5		2,0	6,0	3,0	0,5	**3,0**
Self-actualization	praying	**39,5**	11,8%	3,5	5,0	4,5	7,5	4,5	0,5	2,0	1,5	2,0	0,5	2,5	3,0	2,0	0,5	**2,8**
		336,0	100,0%	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	**24,0**

Besides the time that Azza has spent on the economic activity of sewing, her time-use diary tells us about using almost 12% of the time on non-economic non-consumption activity. Such activity includes preparing food, shopping, looking after her son (awakening the son and going to his school). All this activities are non-income generating. However, if Azza had been well off, another agent could have done these unpaid jobs. We could include here even the exceptional cleaning activity of the entire apartment for the Eid time. The better-off people hire others in order to do this cleaning for them.

5.3 The Joint Diary

As Table 10 illustrates, Azza received her salary from the cooperative on August 3, on the two day after, no time was spent on working and instead half of her first day was spent on visiting her family, and almost one third of her second day was spent on cleaning while 12.5 hours were used for sleeping. It seems that once the financial capital of Azza was used up, she dedicated her time to her human capital where she needed to recover and sleep well, visit her relatives and fulfill the needs for love and belonging, and clean the apartment to get self satisfaction in case friends or relatives drop in.

On the last three days of the period, Azza got no inflows and spent from her savings from the previous days. On those days, the most important amounts of time (besides sleeping) were allocated to cleaning on the first day, to preparing food and watching TV on the second, and to work extensively on the third. Overall, we see that the time allocation of Azza on economic and non-economic activities correspond to her needs for keeping the balance between her financial capital and human capital at the same time. In addition, Azza still finds time to invest in prayers through which she aims to achieve higher levels of self-actualization.

6. Discussion and Conclusion

Both women live in the same poor neighborhood of Egypt. Yet, their lives are completely different. This difference goes beyond what could be revealed by financial diaries alone.

The daily inflow of Salwa is only 42 EGP, which is about 6 USD a day, taking an exchange rate of 7 EGP per dollar. The only regular source of income is carpet cleaning which gave her 90 EGP in the period, which is less than $1 per day. Salwa is clearing among the poorest people in the world. Her handicap status clearly impacts her ability to earn.

Azza has inflows of 1500 EGP which is 2.6 times higher than that of Salwa. At 107 EGP per day, this is about 15 USD per day. Clearly Azza, who comes from the same poor neighbourhood is not amongst the poorest. Her income from sewing and other customers, without taking into account gifts and one-time income from the researchers places her at a much higher level than the USD 2.5 dollars a day poverty line. Even though Azza has an adolescent who is still in school, her financial consumption patterns show a much fuller life. The time use shows that both are sleeping for a third of their life. Both of them also spend the same time on food. However, while Salwa spends less time preparing food, she spends more time eating it.

The biggest difference is time-use. A handicapped person does not work much, nor can she clean much. Since she doesn't earn much, she can't go shopping. These are all activities which take a considerable part of Azza's time but not that of Salwa. Instead Salwa uses these hours to watch television, which is a cheap means of passing time.Azza spends much more time to clean than Salwa. Perhaps, cleanliness is a symbol of status and used to impress others. So, we have ascribed this to esteem in Azza's case. In Salwa's case, the minimal cleanliness time does not seem to be esteem related.

Salwa does not seem to be religious: she doesn't mention prayers in her time-use diary. For Azza, this is an important activity. In fact, there seems to be little in Salwa's life which we can categorize as self-actualization.The extreme poverty of Salwa and also her very low irregular income limits her to consumer microcredit from shopkeepers and informal microcredit from family and friends. Azza, who has a high regular income, can take microcredit from formal MFIs.

We can see that the combining of the two kinds of diaries has led to considerable insights on how a handicap not

Table 10. Combined time-use and financial diary of Azza

All figures in hours	30-Jul	31-Jul	01-Aug	02-Aug	03-Aug	04-Aug	05-Aug	06-Aug	07-Aug	08-Aug	09-Aug	10-Aug	11-Aug	12-Aug
Description of activity										Eid	Eid	Eid		
Sleeping	5,5	5,0	7,0	8,5	9,0	7,5	12,5	5,5	5,5	15,0	7,5	10,5	9,0	9,0
Preparing food	2,5	0,5	1,0	0,5	0,5		0,5	6,5	0,5	2,5	2,0		2,0	
Eating	1,0	1,0	1,0	1,0	1,5	0,5	0,5	1,0	0,5		1,0		0,5	0,5
Resting		3,5					1,0	0,5						
Waking, idling in bed	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5	0,5		0,5	0,5	0,5	0,5
Shopping	5,0	1,0	1,5	1,5		1,5		3,5					2,0	0,5
Working		1,0	5,5	2,0	2,5			3,5	3,5	6,0		2,5	3,0	9,0
Meeting the researcher	1,0													
Watching TV	2,0	0,5							0,5			1,5	2,0	
Awakening the son		1,0	0,5	0,5					0,5					
Going to the school of the son					3,0									
Time with the family	1,0	0,5									8,5			
Meeting friends in street		1,5			1,5									3,5
Visiting relatives						13,0								
Cleaning	2,0	3,0	2,5	2,0	1,0	0,5	7,0	1,5	10,5		2,0	6,0	3,0	0,5
praying	3,5	5,0	4,5	7,5	4,5	0,5	2,0	1,5	2,0	0,5	2,5	3,0	2,0	0,5
	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0	24,0
Inflow (EGP)	68,0	40,0	100,0	30,0	680,0	175,0	70,0	60,0	112,0	25,0	140,0	0,0	0,0	0,0
Ouflow (EGP)	217,0	38,0	36,0	26,0	729,0	100,0	20,0	175,0	96,0	36,0	70,0	15,0	17,0	32,0
Balance (EGP)	1,0	3,0	67,0	71,0	22,0	97,0	147,0	32,0	48,0	37,0	107,0	92,0	75,0	43,0

only limits the income, but also forces one to consumption patterns of time and money which are different.

7. Recommendations

A larger study done on a large scale would require considerable funding as well as considerable time in understanding how handicapped people are driven to poverty both of income and of life choices. Although these statements sound self-evident, our research shows that the exact kinds of uses of time may also have relationship to channels for maintaining self-esteem.

These insights may provide considerable benefits to marketers who want to include the bottom of the pyramid as well as to donors who want to understand what services can be provided to poor people.

It is clear that handicapped people cannot afford to take any microcredit: they could not repay it. Instead, they need to be provided services which can help them pass time. Television is one source. Perhaps, Salwa would like some service in which she can participate more actively, such as online activity. But she can clearly not afford to buy a computer or learn how to use it.

There is a growing literature indicating that transfer payments, such as aid, create dependency and lead to the maintenance of poverty (Darity Jr and Myers Jr 1987, Calderisi 2006, Easterly 2006, Moyo 2009). But, perhaps, as maintained by Sachs (2005), some people are so poor and disabled, that only charity is a solution. However, for people becoming disabled after working for many years, a good disability insurance or pension system could also be useful.

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