



# Assessing Financial Capability in People with a Mild Intellectual Disability

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Master Thesis - Clinical Neuropsychology

*August 2023*  
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### **Abstract**

To date only a few studies focused on financial capability, especially in people with a mild intellectual disability (MID). Exploring this subject is important, as people with MID are at greater risk of being in debt and experiencing poverty. Three instruments, the Financial Competence Assessment Inventory (FCAI), the Financial Decision-Making Interview (FDMI) and the Financial Performance Scale (FiPS) are developed to examine financial capability, but these have not been used in the Dutch MID population. Therefore, the aim of this study is to examine whether these instruments are applicable to the Dutch MID population. Additionally, the aim is to explore the financial capability of people with MID. This is done by administering the instruments together with an additional interview in five participants with MID. Data of the instruments is analyzed in a descriptive way, and the data of the interviews is analyzed by thematic analysis. Results show that the instruments are applicable but applicability can be increased by making minor changes. Results also show that several themes can be identified regarding the financial capability of people with MID, like assistance of others, positive aspects and negative aspects. The conclusions of this study are that the instruments are applicable and that people with MID generally have a lower financial capability than people without MID. Further research into a larger group of people with MID is advised.

*Keywords: financial capability, mild intellectual disability, Financial Competence Assessment Interview, Financial Decision-Making Interview, Financial Performance Scale*

## **Assessing Financial Capability in People with a Mild Intellectual Disability**

Every day, we encounter various situations that require us to engage in financial activities. These situations encompass purchasing groceries, refueling our vehicles, and even more complex scenarios like buying a house or negotiating a new job's salary. For most individuals, these circumstances are generally manageable to varying degrees. Regrettably, there are groups in the population for whom these situations present significant challenges.

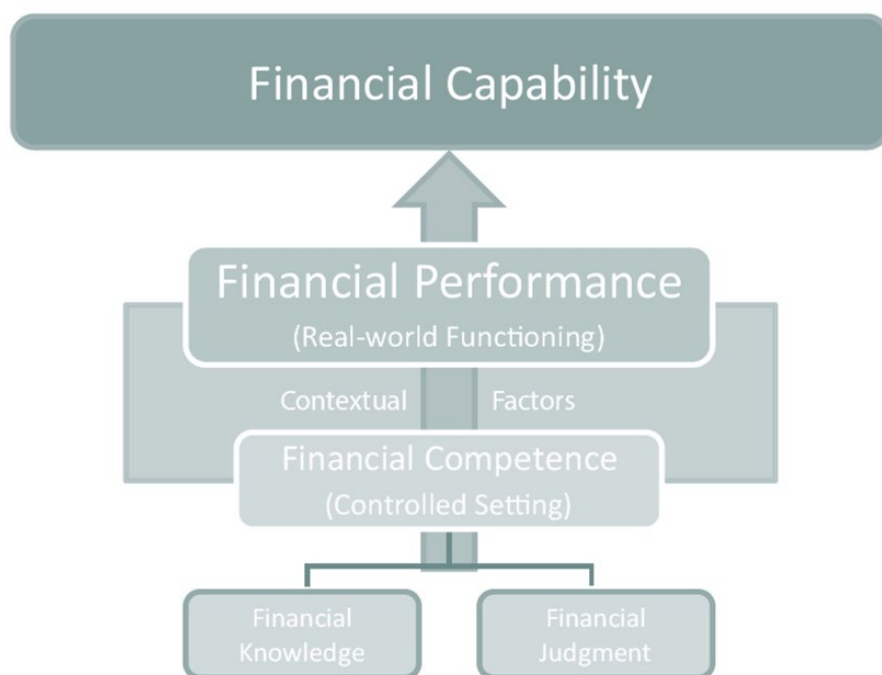
In all financial contexts, individuals necessitate a certain level of financial capability. Financial capability, as defined by Appelbaum et al. (2016), denotes a person's ability to manage or oversee the management of their financial resources. The body of literature dedicated to financial capability remains relatively limited (Marson, 2016). This scarcity can be attributed to the complex nature of financial capacity as a construct and the lack of assessment tools tailored to measure it.

The Institute of Medicine (IOM) has presented a model of financial capability (Appelbaum et al., 2016), illustrated in Figure 1. This model hinges on the premise that an individual's genuine financial capability is best measured through their real-world financial performance. Financial performance is characterized as “an individual's degree of success in handling financial demands in the context of the stresses, supports, contextual cues, and resources in his or her actual environment.” In contrast, financial competence is defined as “the financial skills one possesses, as demonstrated through financial knowledge and financial judgment, typically assessed in a controlled environment.” Financial competence can be divided into two components: financial knowledge and financial judgment. Financial knowledge comprises both declarative and procedural knowledge. Financial judgment encompasses four abilities: 'understanding,' 'appreciation,' 'reasoning,' and 'communication' (Koerts et al., 2021). It's worth noting that financial performance doesn't solely depend on the level of financial competence but is also influenced by contextual factors (Appelbaum et al.,

2016). Adequate support systems can bolster individuals with limited financial competence, boosting their financial performance. Personal factors like substance abuse or mental state can also impact financial performance, along with environmental factors like socioeconomic status (Appelbaum et al., 2016).

### Figure 1

*Institute of Medicine Model of Financial Capability*



*Note.* Adapted from “Committee to Evaluate the Social Security Administration's Capability Determination Process for Adult Beneficiaries; Board on the Health of Select Populations; Institute of Medicine; National Academies of Sciences, Engineering, and Medicine. Informing Social Security's Process for Financial Capability Determination” by Appelbaum, et al., (2016). *Informing Social Security's Process for Financial Capability Determination*. National Academies Press (US).

A specific subgroup within the population susceptible to challenges in financial capability consists of individuals with intellectual disabilities (ID). An ID is characterized by significant impairment in intellectual and adaptive functioning, beginning during the

developmental age (American Psychological Association, 2013). Various definitions of ID exist, but most emphasize two key aspects: clear impairments in intellectual functioning coupled with deficiencies in adaptive functioning. These impairments should manifest early in development and be chronic (Didden et al., 2008). Individuals with ID often experience behavioral and psychiatric issues. The DSM-5 classifies ID into four categories: mild, moderate, severe, and profound (Institute of Medicine, 2015). This research will concentrate on individuals with Mild Intellectual Disability (MID). Beyond the previously mentioned impairments, MID individuals also face cognitive deficits. While literature on cognitive deficits in MID individuals is inconsistent, there's a consensus that executive functioning (EF) and processing speed are compromised (Schuiringa, et al., 2017). EF encompasses skills like working memory, inhibition, and cognitive flexibility. Working memory can be defined as the ability to hold, monitor, and manipulate information that is relevant to a particular goal (Baddeley, 2007). Inhibition can be defined as the ability to withhold a prepotent response. Cognitive flexibility can be defined as the ability to adapt to changing environments by shifting between tasks or mental sets (Schuiringa, et al., 2017). Processing speed is important for responding in daily life situations, as these situations demand quick responding. Low processing speed affects this responding (Brunnekreef et al., 2007).

Given the cognitive limitations experienced by MID individuals, it is anticipated that they will encounter difficulties across various aspects of financial capability. This notion is reinforced by Suto's (2005) study, which reveals that adults with ID demonstrate more impairments in financial decision-making compared to the general population. Additionally, deliberative information processing, essential for decision-making, is associated with working memory, which is impaired in MID individuals (Bangma et al., 2017). Financial decision-making, similar to financial judgment in the Appelbaum model (2016), is an important facet of financial capability. Research also links financial decision-making abilities to IQ (Willner

et al., 2010; Suto et al., 2005). Furthermore, EF is correlated with financial decision-making, with some arguing its greater importance over IQ (Murphy & Clare, 2021). Given the significance of financial capability in daily life, challenges may lead to financial instability, poverty, or exploitation (Bangma et al., 2021). Additionally, because of the complexity of financial capability, people with MID are at greater risk for experiencing problems regarding their finances. For example, people with MID are at greater risk for debts and poverty (Albers & Kremer, 2020).

Due to the cognitive impairments experienced by MID individuals, it's conceivable that they might perform less well in the 'financial competence' aspect of the Appelbaum model (2016). Financial competence is typically assessed under controlled conditions and is influenced by various cognitive domains. Consequently, MID individuals are likely to exhibit lower levels of financial knowledge and financial judgment. However, this doesn't necessarily imply poorer scores in the financial performance domain. Contextual factors come into play, and even in the absence of comprehensive financial knowledge and judgment, MID individuals can perform adequately in everyday situations thanks to support from family or professionals.

Financial capability remains a relatively understudied area in current literature. Existing research has especially overlooked the financial capability of individuals with MID. Several instruments are available for measuring financial capability, including the Financial Competence Assessment Inventory (FCAI; Kershaw & Webber, 2008), the Financial Decision-Making Interview (FDMI; Bangma et al., 2017), and the Financial Performance Scale (FiPS; Koerts et al., in preparation). These instruments reflect different facets of the Appelbaum model: FCAI captures financial knowledge, FDMI assesses financial judgment, and FiPS measures financial performance. Currently, these instruments are employed in the general population to evaluate various dimensions of financial capability. However, they have

not been applied to the Dutch MID population. Kershaw and Webber (2008) validated and standardized the FCAI for individuals with ID in Australia, but without specifying the severity of the intellectual disability. Additionally, the FDMI and FiPS have never been used with ID individuals in the Netherlands or elsewhere. Given this lack of information, this study aims to explore the applicability of these instruments within the Dutch MID population. The second aim will be to investigate the financial capability of this group. This investigation will encompass administering the FCAI, FDMI, and FiPS alongside conducting interviews. Serving as a pilot study, this research will lay the groundwork for future endeavors, ultimately contributing to a greater understanding of financial challenges faced by MID individuals. The insights gained can inform interventions aimed at enhancing the financial capability of individuals with MID.

## **Method**

### **Participants**

For this study, 1 participant with MID were recruited through the healthcare facility Alliade, and 4 participants with MID were recruited through the interest group LFB (Landelijke Federatie Belangenbehartiging) Wolvega. The participants (4 male and 1 female) had all been diagnosed with MID, as was established by self-report of participants. For two participants with MID, the diagnoses of MID was verified through their records. Their ages ranged between 31 and 77 years ( $M = 53.20$ ). The participants with MID were native Dutch speakers, and they had volunteered for the study. The participants with MID had not received any compensation for their participation in the study. Exclusion criteria included having a moderate, severe, or profound intellectual disability, having a legal representative or receiver, having comorbidities that interfered with daily functioning, like posttraumatic stress disorder, and having a visual or auditory limitation which caused impairments in everyday functioning.

In the analysis of the FCAI and the FDMI (please see below), data from a control group was used as previously described in Koerts et al. (2023). The control group had consisted of 47 German participants without MID (24 male, 22 females, 1 gender missing), with their ages ranging between 20 and 64 years ( $M = 38.51$ ). Participants of the control group were recruited through the researchers, social media, and word-of-mouth. They were excluded when they had scored on or above the cut-off on the Wender Utah Rating Scale – Childhood (WURS-K; Ward et al., 1993; Rösler et al., 2008) and the ADHD self-report scale (ADHD-SR; Rösler et al., 2008). Participants without MID had also been excluded when they were diagnosed with a severe neurological or psychiatric condition. Participants without MID had ultimately been disqualified due to the unavailability of their scores on the FCAI at the item level (Koerts et al., 2023).

The Medical Ethics Review Board (METc) of UMC Groningen had concluded that the study in people with MID was not clinical research with human subjects as meant in the Medical Research Involving Human Subjects Act (WMO). The Ethical Commission of the Psychology Department at the University of Groningen had approved this study. The study in control participants was approved by the local ethical review board of the medical faculty of the University of Duisburg-Essen, Germany.

### **Design and Procedure**

In this study, a mixed-methods approach was used, encompassing both quantitative and qualitative research methods. The quantitative part consisted out of the FCAI, FDMI and FiPS and the qualitative part involved conducting interviews. Prior to their participation in the study and signing an informed consent, all participants with MID received information about the study and had the opportunity to ask questions. Participants with MID were invited to participate in both parts of the study. The total assessment duration was around three hours. If necessary, the assessment could be spread out over two sessions. A script was used to guide

the assessment, detailing the introduction of the various instruments. Data gathered out of this quantitative part of the study was pseudonymized and processed using subject codes. The assessment had started with the administration of a general questionnaire followed by the FCAI, FDMI and the FiPS. A description of these instruments can be found below. After completing each instrument, the researcher had asked questions about the participants' experiences with the assessment and the instrument. These questions had aimed to gather information about how the participant perceived the instrument, including aspects such as perceived ease or difficulty, as well as suggestions for potential improvements. After the quantitative assessment and the corresponding questions, a fifteen-minute break was held if preferred by the participant. Subsequently, the qualitative part of the assessment was conducted. For this purpose, an interview guideline was used (see Appendix A). Afterwards, the participant was offered the opportunity to ask questions. At the end of the entire assessment, participants with MID were provided with a debriefing regarding the study.

In the study involving control participants, demographic data was collected, including age, years of education, sex and employment-status. Symptoms of ADHD were evaluated using the WURS-K and the ADHD-SR. Annual gross income was rated on a six-point scale, ranging from €15.000 to €55.000 (Koerts, et al., 2023).

## **Materials and measures**

### ***Quantitative assessment***

The FCAI (Kershaw & Webber, 2008) assessed participants' strengths and weaknesses concerning financial judgment and financial knowledge. It used a structured interview format and comprised 38 items, which could be categorized as theoretical questions, practical assignments or questions about the financial situation of the participant. The questions were divided into six different subscales: 'everyday financial abilities' (e.g., paying bills), 'financial judgment' (e.g., financial goals), 'cognitive functioning related to financial tasks'

(e.g., functional memory), ‘estate management’ (e.g., understanding Power of Attorney), ‘debt management’ (e.g., having an overview of current debts), and ‘support resources’ (e.g., knowing where to look for help in managing finances). Responses were assigned scores on a scale from 0 (little or no awareness) to 4 (complete understanding). Six questions required either a ‘yes’ or ‘no’ answer. Higher scores indicated a greater knowledge and understanding of financial competence (Bangma, et al., 2021).

The FDMI (Bangma, et al., 2017) is a semi-structured interview that focuses on financial judgment. Five vignettes of increasing difficulty were presented that each consisted of a hypothetical financial problem. Interview questions were asked and based on the answers, five abilities of financial judgment were evaluated: ‘identification’, which is the ability to identify a problem, ‘understanding’, which is the ability to understand information and consider risks and benefits, ‘appreciating’, which is the ability to appreciate and evaluate the effects of decisions, ‘reasoning’, which is the ability to reason about different options and make a reasoned decision, and ‘communicating’, which is the ability to articulate a final choice. For each response, participants were assigned a score of 0, 1 or 2, depending on the degree of comprehensiveness. For each ability, a maximum score of 2 could be obtained. Per vignette, a maximum score of 10 could be acquired. The vignette scores were combined into a total score, along with individual scores for each of the five abilities across all vignettes. A higher score had correlated with a better financial judgment (Bangma, et al., 2017).

The FiPS (Koerts, et al, in preparation) is a self-report questionnaire that focused on financial capabilities in everyday life (e.g., ‘When I pay for a purchase in cash, I manage to check how much change I get back’ or ‘I am good at saving money.’). In this study, the questions were read aloud to the participants with MID. The FiPS consisted of 53 items, which were rated on a scale from 1 (completely disagree) to 5 (completely agree). These items were complemented with some questions about the participants’ financial situation.

These questions included subjects such as sources and height of income, whether the participant had a mortgage or paid rent, living situation, who managed their finances, debt, receiving reminders for overtime payments and saving money. Participants with MID were instructed to rate the importance of their financial self-reliance on a scale ranging from 1 (not important) to 5 (very important). Furthermore, participants with MID were asked to evaluate their stress levels and their satisfaction with their financial situation using a scale of 0 (no stress; very unsatisfied) to 10 (high stress; very satisfied). A higher score on the FiPS had indicated better financial performance.

In addition to these three instruments, demographic information of the participant was collected, including age, sex and self-reported level of disability. This was done by administering a general questionnaire. Clinical information, such as comorbidities and estimated IQ, was collected from the record of the participant when available.

### ***Qualitative assessment***

Within the qualitative part of the study, semi-structured interviews were conducted with the participants with MID. An interview guideline was prepared prior to the interviews, serving as a guideline throughout the interview process. During these interviews, various topics were addressed, including the participants' financial status, responsibilities, and support. An example of a question posed about the participants' financial situation had been, "How did you perceive your current financial situation?" Another example related to financial responsibility had been, "Who was responsible for managing your finances?" Additionally, an example question within the financial support domain had been, "Did you receive any assistance with managing your finances?"

## **Analysis**

### ***Quantitative analysis***

A digital answering sheet for the FCAI, FDMI, and FiPS was generated using REDCap (Research Electronic Data Capture; Harris, et al., 2009; Harris, et al., 2019). The quantitative instrument data was entered into this platform. Subsequently, the data collected in REDCap was exported to Microsoft Excel (Microsoft Corporation, 2018) and JASP (JASP Team, 2023). In Excel, tables and graphs were generated to provide visual representation of the data. Descriptive statistics were extracted using JASP (JASP Team, 2023). The data from the FCAI and the FDMI (Vignette 4 and Vignette 5) was compared to a control group. This comparison was performed by contrasting the individual item scores of all participants with MID against the mean item scores of the control group. The narrative description of the data was supplemented with graphical representations.

### ***Qualitative analysis***

The data from the interviews was transcribed and analyzed using thematic analysis. For the thematic analysis, the six steps outlined by Braun and Clarke (2013) were followed. These six steps were as follows: 1) (re)reading transcripts, 2) generating initial codes, 3) grouping codes into potential overarching themes, 4) evaluating the themes, 5) refining, specifying, and describing the themes, and 6) reporting the analysis. The data coding was conducted using Taguette (Rampin, et al., 2021). All the interviews were independently coded by two researchers. Subsequently, a consensus meeting was convened involving three researchers to deliberate on the coding and themes.

## **Results**

### **General characteristics**

In this study, five participants with MID were assessed and interviewed. During the assessment, there were no indications to suggest that the assessments were not valid. Three

participants with MID had completed both the quantitative and qualitative assessments. Due to time constraints, one participant had only completed the quantitative assessment, while another participant had only completed the FCAI and the FDMI. General characteristics of the participants with MID were outlined in Table 1. All the participants with MID had rated their financial self-reliance as very important ( $M = 4.60$ ;  $SD = 0.55$ ). The participants with MID had not experienced high levels of stress regarding their financial situation ( $M = 4.20$ ;  $SD = 1.92$ ). Overall, the participants with MID were satisfied with their financial situation ( $M = 8.00$ ;  $SD = 1.22$ ). The general characteristics of the control group were detailed in Table 2.

**Table 1***General Characteristics of the Five Participants with MID*

	Age	Gender	Source of income	Living situation	Monthly income	Financial management	Debt	Receiving a reminder due to overdue payments	Saving money
Participant 1	31	Male	Money for food; pocket money	Independent with ambulatory care	< €500	Somebody else	No	Never	Yes
Participant 2	44	Male	Welfare; volunteer allowance	Independent with ambulatory care	< €500	Somebody else	No	Once every year	Yes
Participant 3	61	Male	Welfare; wage	Independent with roommate	€500 - €1000	Self with help of others	No	Once every six months	No
Participant 4	53	Female	Not aware	Independent with ambulatory care	< €1500	Somebody else	No	Never	Yes

Participant			Old age	Independent,					
5	77	Male	pension (AOW);	without	< €1500	Self	No	Never	Yes
			volunteer allowance	partners or children					

**Table 2***General Characteristics of the Control Group*

Age in years	38,51 (13,04)
<b>Gender</b>	
% female	46,81
% male	51,06
<b>Education</b>	
% Hauptschule	5,51
% Realschule	17,02
% Gymnasium	72,34
<b>Work status</b>	
% with paid job	85,11
% without paid job	14,89
<b>Living situation</b>	
% homeowner	55,32
% mortgage	31,92
<b>Annual gross income</b>	
% < 15.000	12,77
% 15.000 – 25.000	12,77
% 25.000 – 35.000	19,15

% 35.000 – 45.000	8,51
<hr/>	
% 45.000 – 55.000	12,77
<hr/>	
% >55.000	29,79

After assessing the first participant with MID using the FCAI, FDMI, and FiPS, minor adjustments were made to the FiPS due to the participant's inability to comprehend several questions. Specifically, seven items that were negatively phrased to maintain participant focus were rephrased in a positive manner. For instance, the statement "I'm unable to coordinate my income and expenses" was changed to "I'm able to coordinate my income and expenses." Moreover, visual representations of the answer scales were introduced. This approach allowed participants with MID to refer to the display and select the answer that most accurately corresponded to their situation. This modification was implemented to prevent the possibility of participants with MID forgetting the answer options.

Following the initial assessment, additional information regarding the challenges associated with managing finances was incorporated into the research protocol. During the first assessment, researchers had observed that the participant held negative thoughts concerning their performance on the instruments. Consequently, supplementary information was included prior to the subsequent assessments to emphasize that everyone might perceive financial matters as complex. The same information was included in the debriefing process.

### **Remarks on instruments**

Several remarks were provided by the participants with MID concerning the FCAI. In general, they had found the test enjoyable. The duration of the test was deemed sufficient, although one participant had indicated that it might be excessively lengthy for some individuals. Two participants had mentioned that the level of difficulty suited them, while the other three had found the test to be challenging. Specifically, the participants with MID had

encountered difficulties with the phrasing of certain questions, finding them too intricate or the sentences too lengthy. Additionally, one participant was unable to complete questions accompanied by visual elements due to the small size of the letters, impeding their readability.

The participants with MID had made several observations regarding the FDMI. All participants with MID had considered the test enjoyable. There was considerable variation among the participants with MID in the number of vignettes they were able to complete, given that the vignettes increased in difficulty. Two participants with MID had completed the first three vignettes, one participant had completed the first four vignettes, and the other two participants with MID had completed all the vignettes. Among those who had completed all the vignettes, the last vignette was perceived as challenging, while the preceding four had not. Two participants with MID had commented on the length of the vignettes. One participant had mentioned that the last two vignettes were too lengthy, and another participant had stated that the first three vignettes should not have been any longer.

As for the FiPS, the participants with MID had also provided feedback. Overall, they had considered the questionnaire to be acceptable, but not as enjoyable as the previous two instruments. All participants with MID had noted that the phrasing of the questions was difficult, along with the wording of the questions themselves. Two participants with MID had indicated that the duration of the questionnaire was excessive, particularly due to its repetitive nature. The visual display of the answer scale was perceived as convenient by all participants with MID.

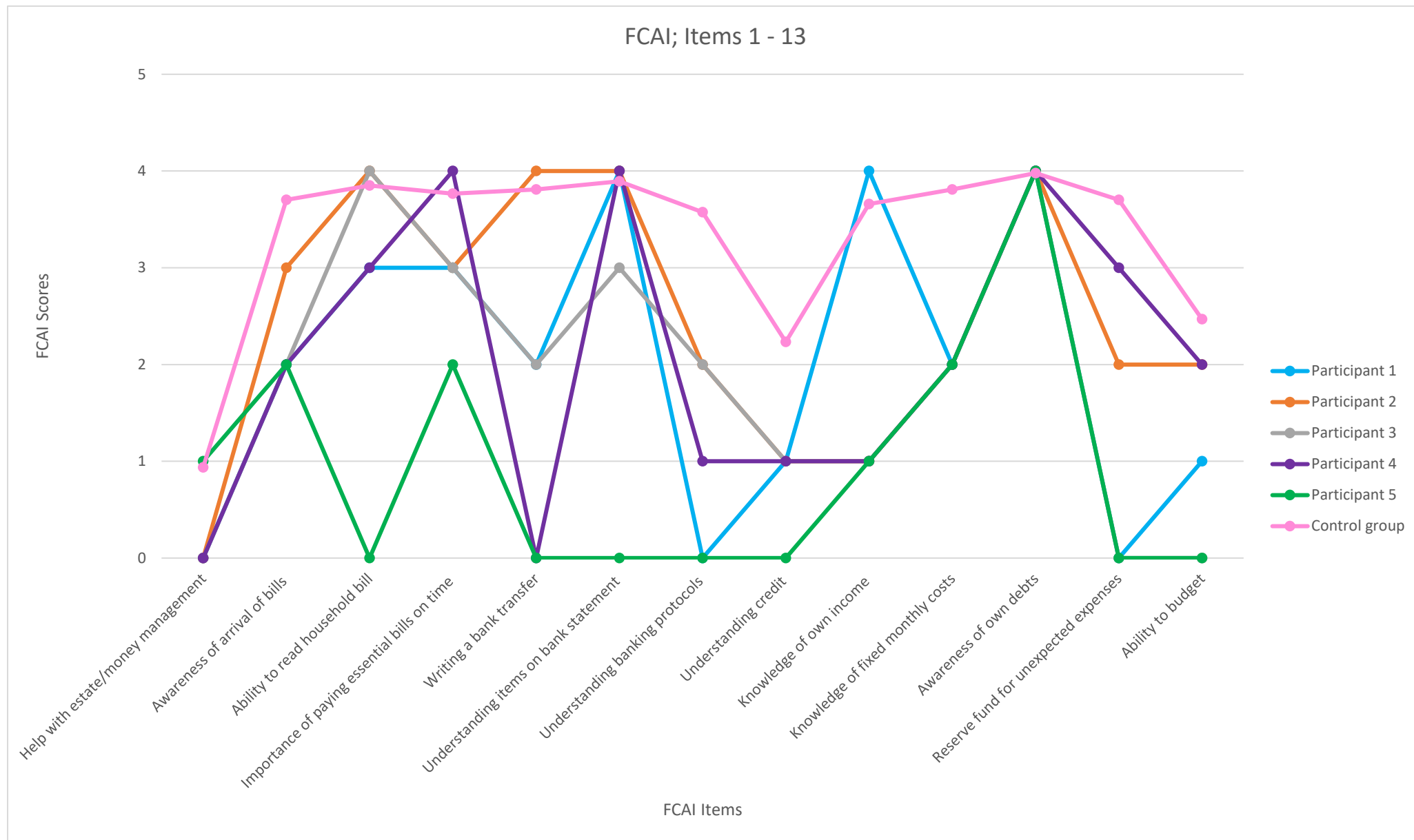
### **Scores on instruments**

The FCAI was completed by five participants with MID. Individuals with MID had demonstrated lower scores on various items of the FCAI in comparison to the control group (Figure 2). Discrepancies were more pronounced for items related to specific financial knowledge, such as understanding an overdraft facility (item 7) or comprehending the concept

of assets (item 20). Variations had also been noted in their awareness of their own financial situation, encompassing knowledge of their income (item 9), recognition of monthly expenses (item 10), or the recollection of when their financial obligations had last changed (item 35). Additionally, disparities had emerged in relation to setting financial objectives, including the capability to establish long-term financial goals (item 15) and the aptitude for making investment decisions (item 38). The control group had exhibited a higher level of consistency in achieving elevated scores for their responses, whereas participants with MID had displayed greater variability in the scores they had attained.

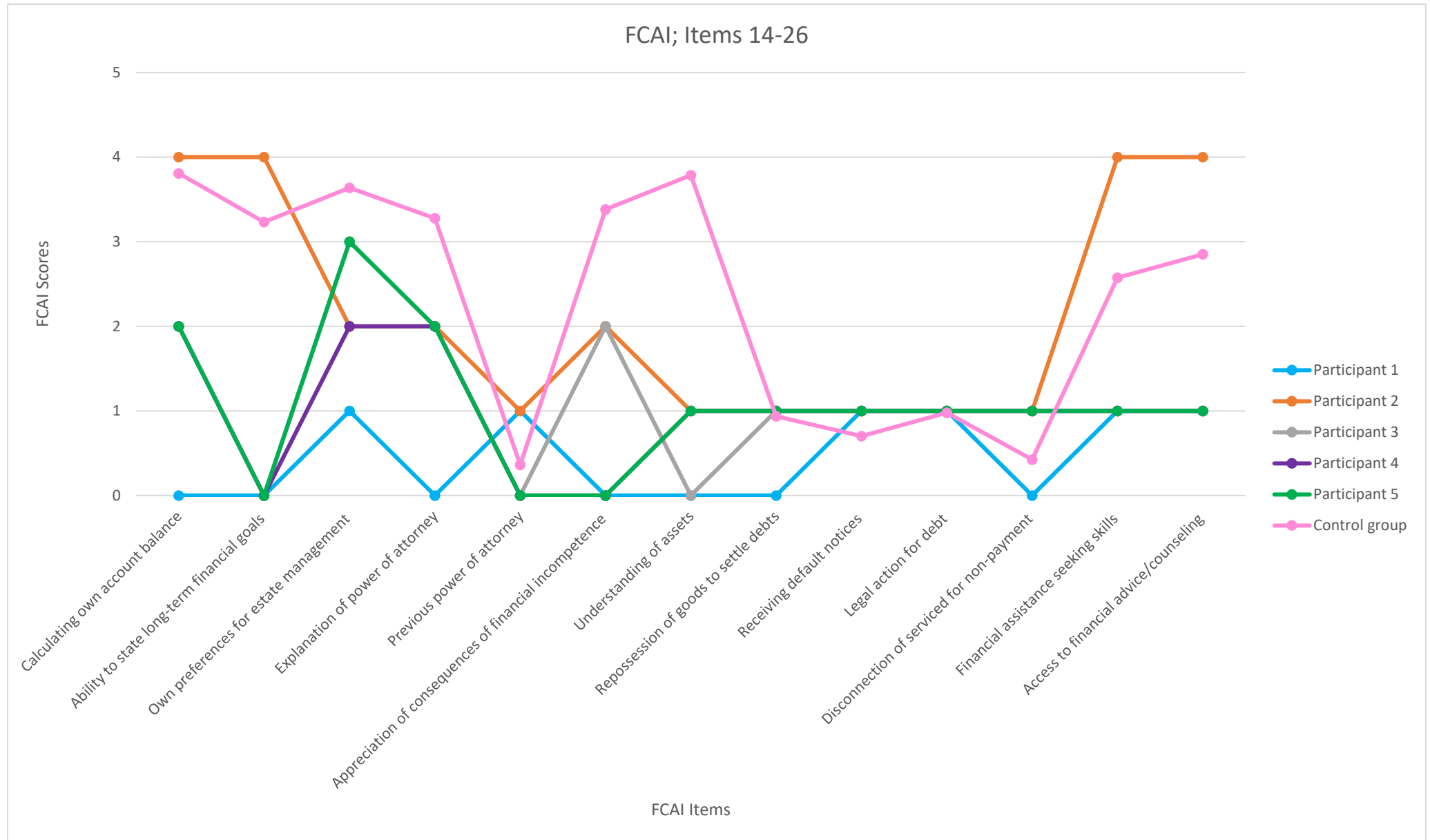
**Figure 2a**

*FCAI Scores Items 1-13*



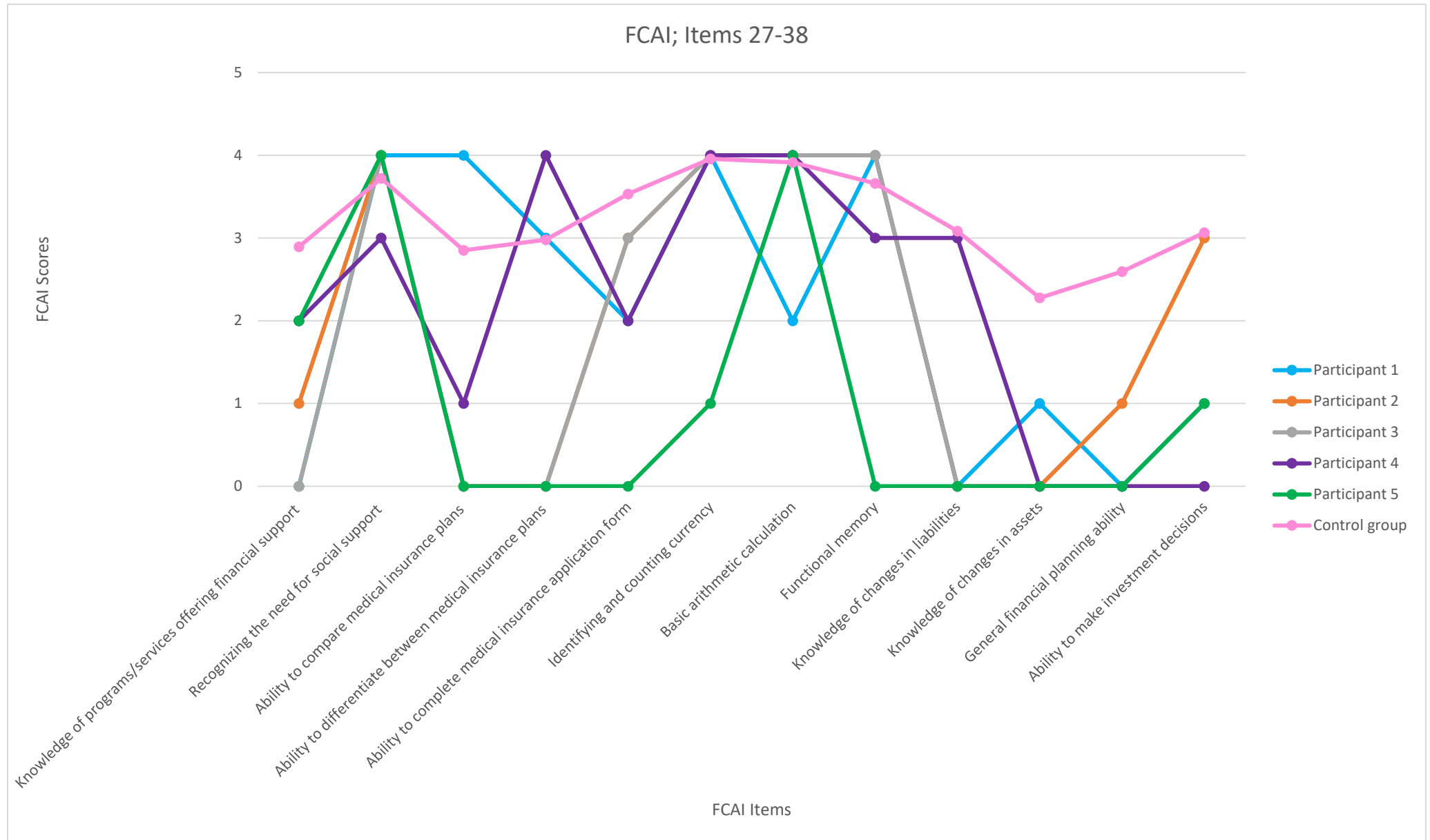
**Figure 2b**

*FCAI Scores Items 14-26*



**Figure 2c**

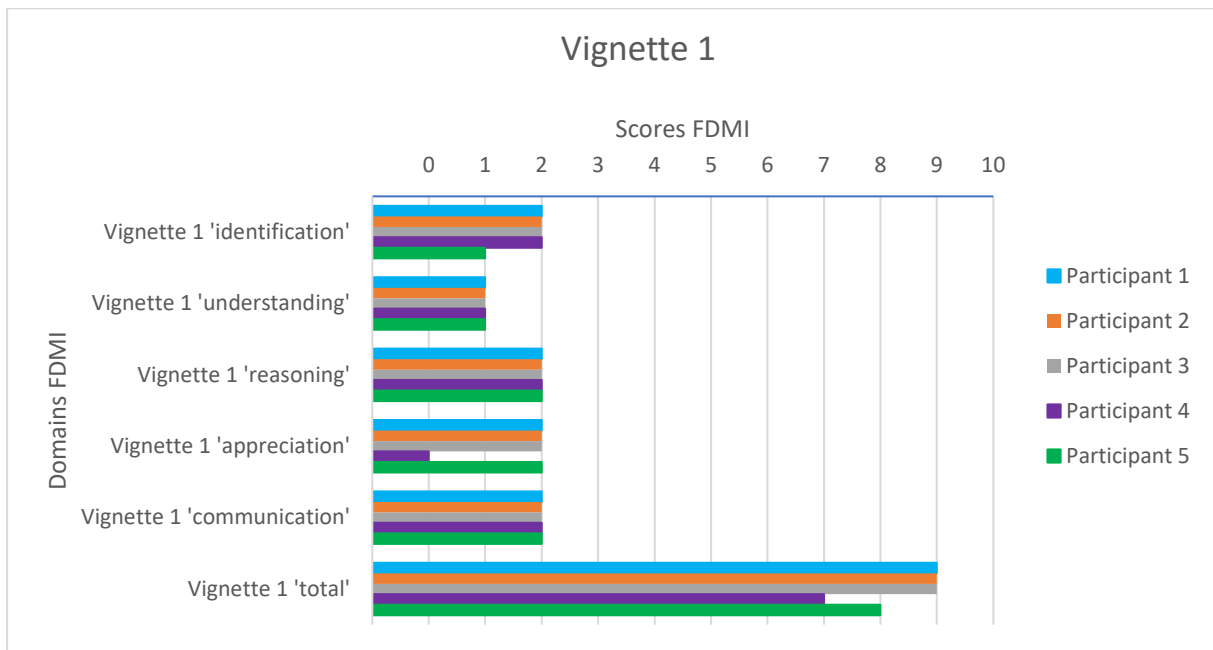
*FCAI Scores Items 27-38*



All five participants with MID had completed the FDMI. Among them, two participants with MID had successfully completed the first three vignettes, one participant with MID had managed the first four, and two participants with MID had completed all five of the vignettes. All participants with MID had performed well on vignette 1 (Figure 3). It was notable that none of the participants with MID had attained the maximum score in the 'understanding' domain. In reference to vignette 2 (Figure 4), the scores had shown more divergence. Once again, 'understanding' had proven to be more challenging for the participants with MID, and so had 'identification' and 'appreciation'. In the case of vignette 3 (Figure 5), the scores had exhibited a more even distribution, though 'understanding' still remained lower. As for vignette 4 (Figure 6) and vignette 5 (Figure 7), the scores of the MID group were compared to those of the control group. In vignette 4, the MID group's scores had generally been lower than those of the control group in the 'identification' and 'understanding' categories. The overall score of the MID group was comparable to that of the control group, except for one participant. In the context of vignette 5, the MID group's scores tended to be lower than those of the control group in 'identification' and 'understanding'. The total scores of the control group tended to be higher than those of the MID group.

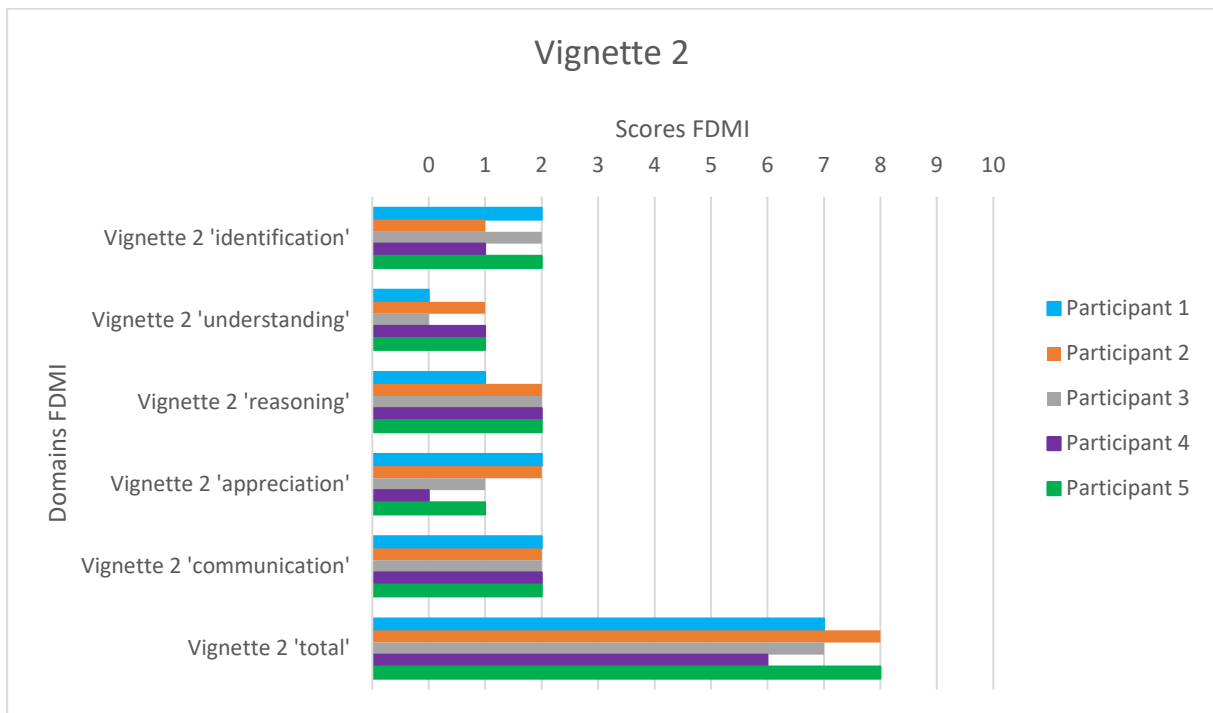
**Figure 3**

*FDMI vignette 1*



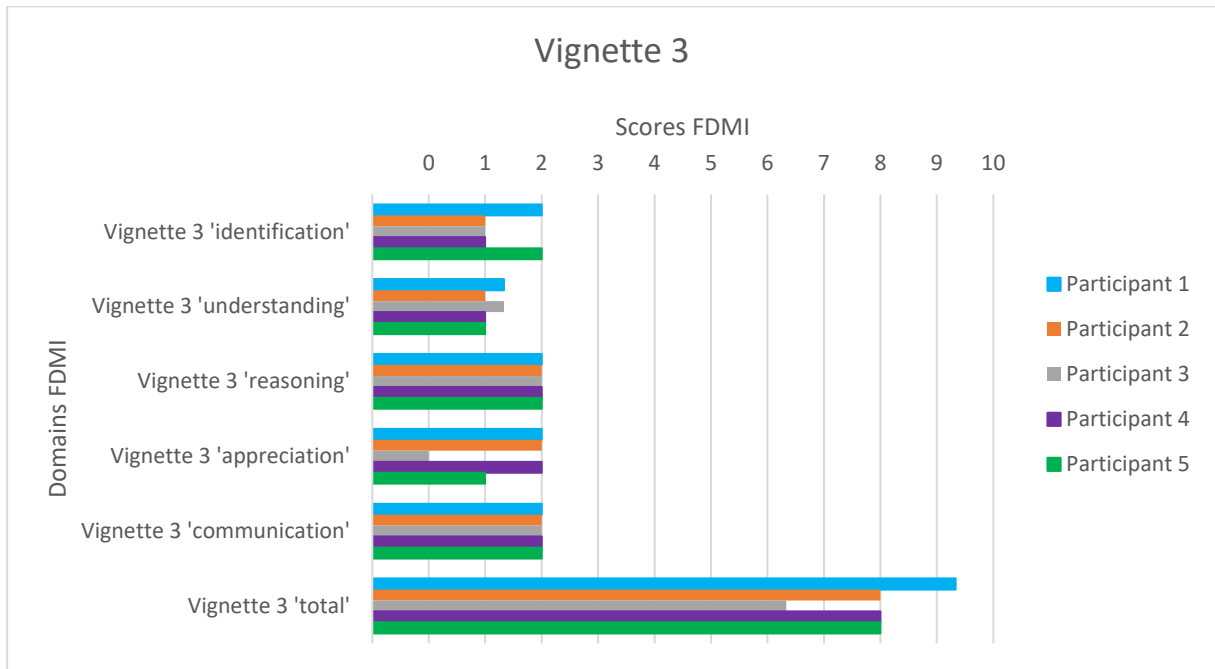
**Figure 4**

*FDMI vignette 2*



**Figure 5**

*FDMI vignette 3*



**Figure 6**

*FDMI vignette 4*

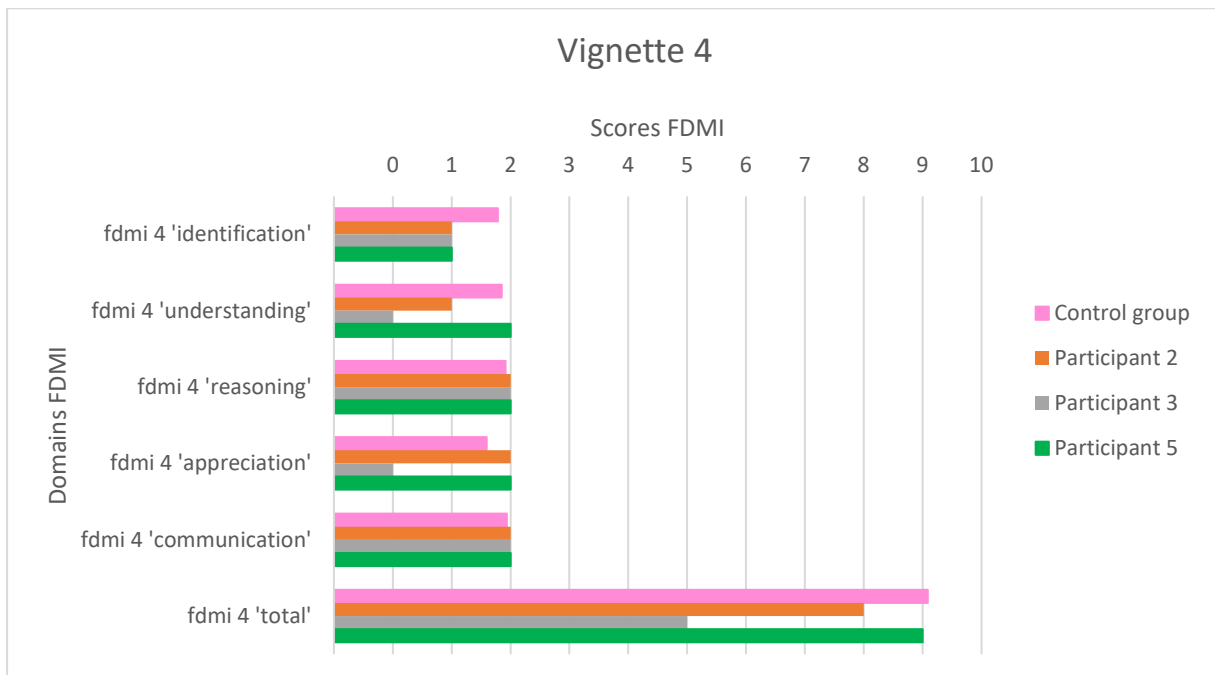
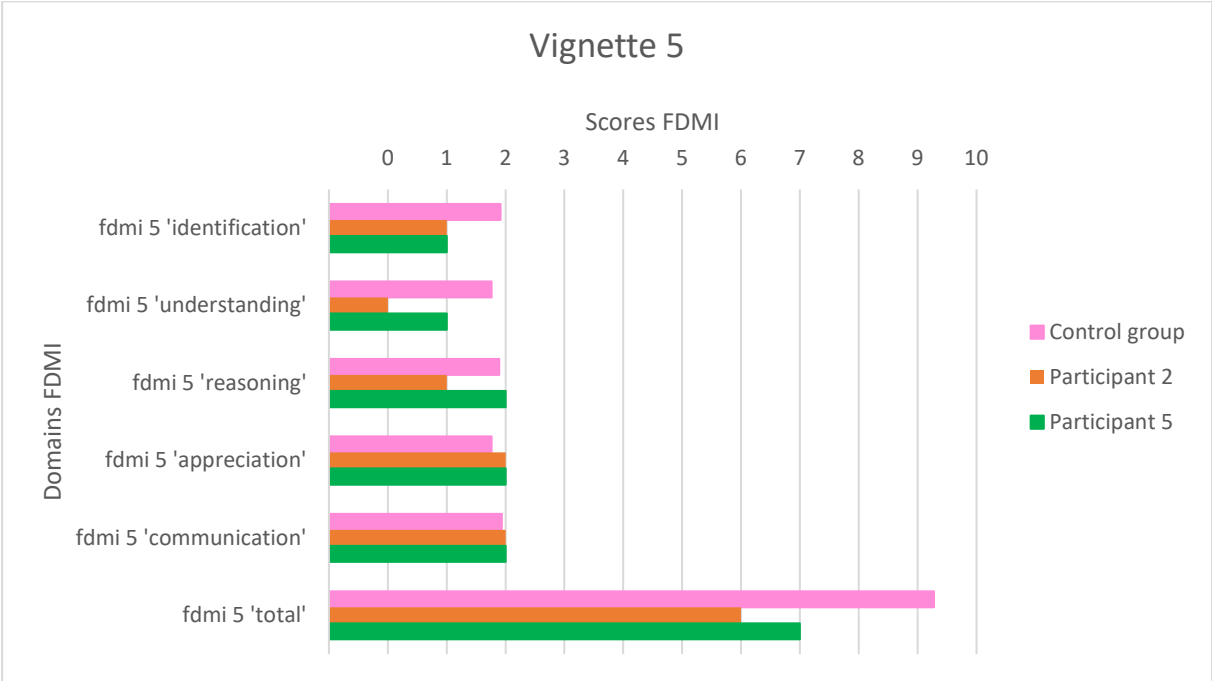


Figure 7

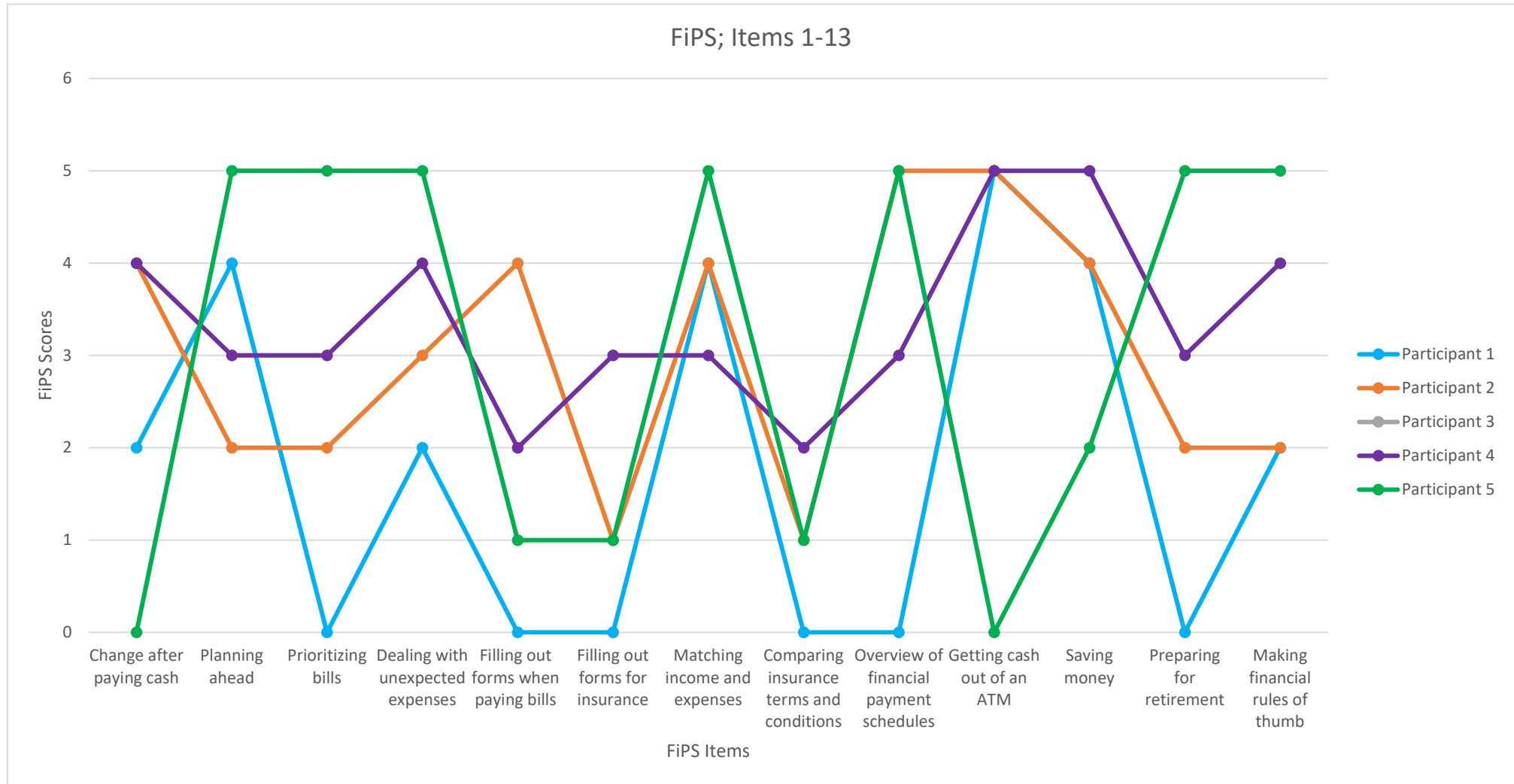
FDMI vignette 5



Four participants with MID had completed the FiPS (Figure 8). In general, the participants with MID had scored similarly high on various items, such as managing income and expenses (item 7), understanding their monthly income (item 14), identifying their sources of income (item 15), recognizing their insurance provider (item 21), making cash withdrawals (item 24), establishing financial goals (item 29), and identifying trustworthy sources for financial advice (item 49). Likewise, the participants with MID had also scored comparably low on several items, including filling out (online) insurance forms (item 5), comparing different insurance policies (item 8), and completing tax returns (item 43).

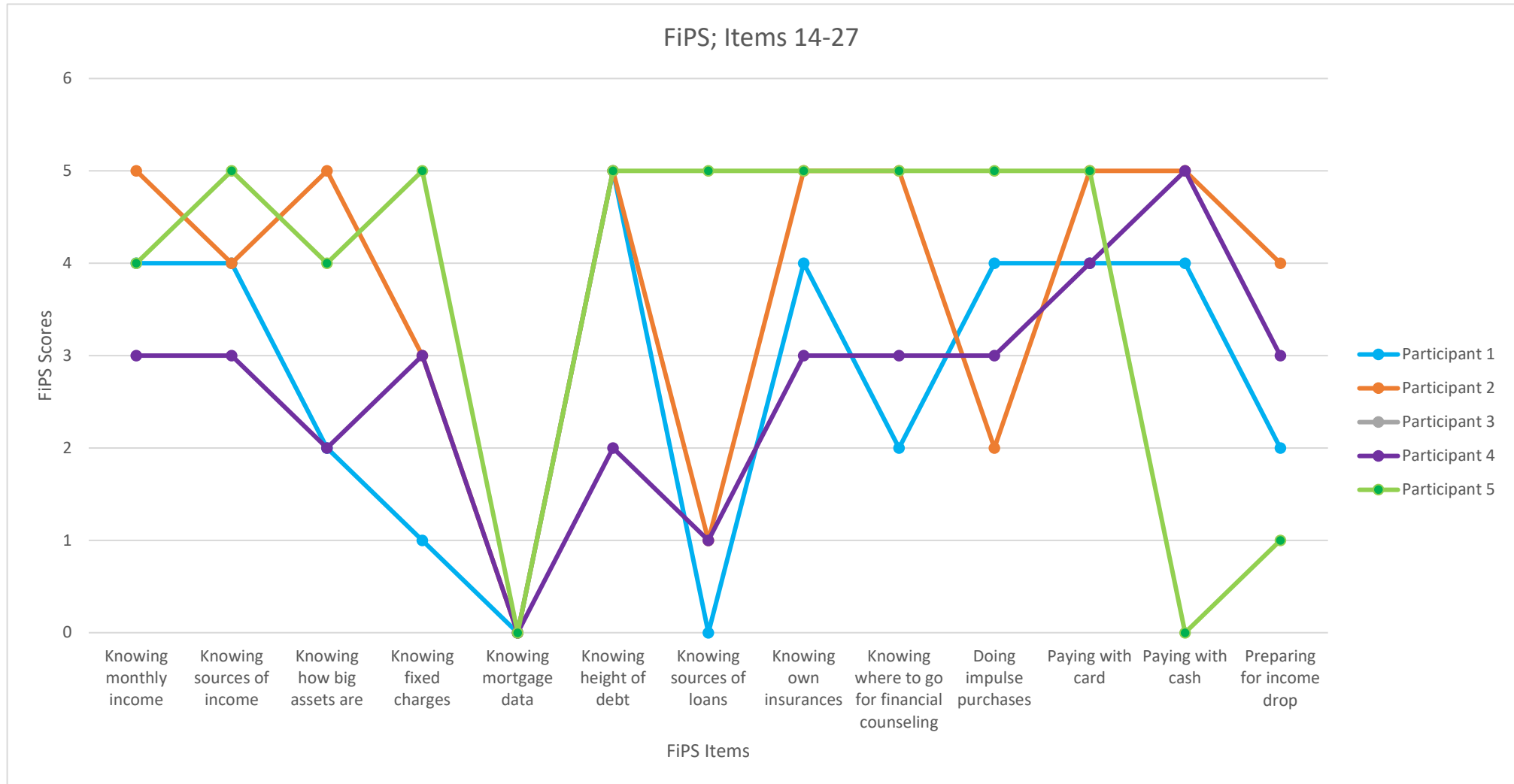
**Figure 8a**

*FiPS Scores Items 1-13*



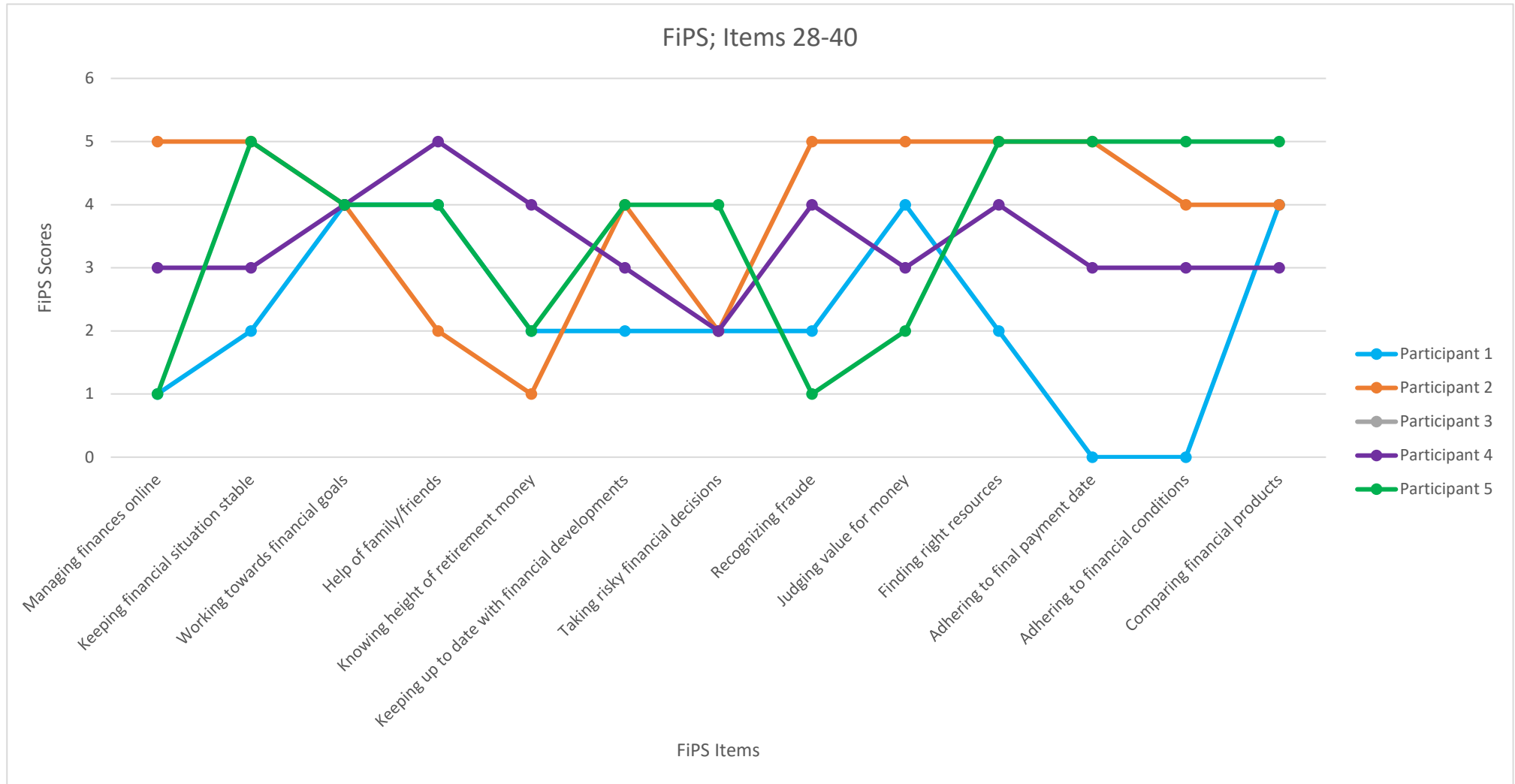
**Figure 8b**

*FiPS Scores Items 14-27*



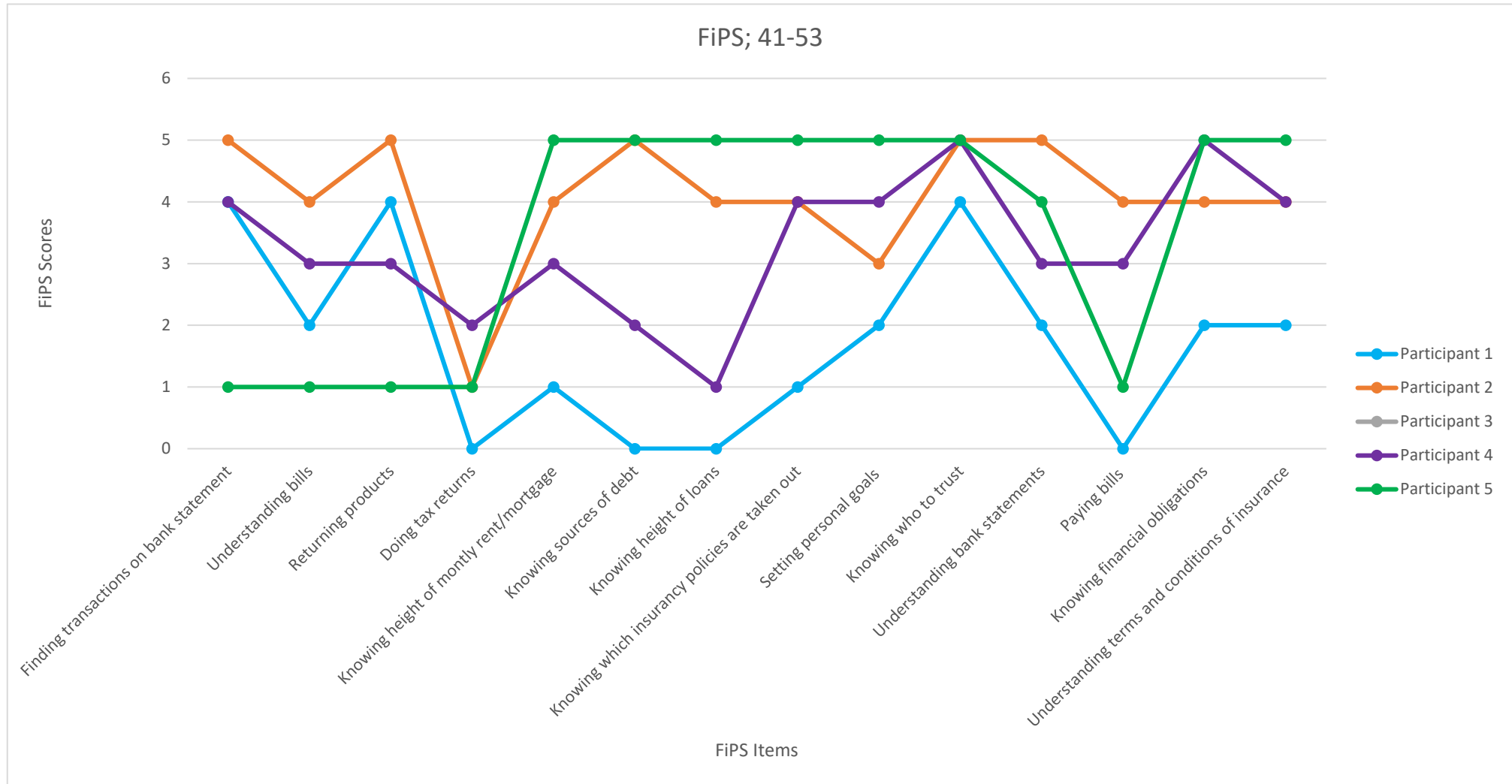
**Figure 8c**

*FiPS Scores Items 28-40*



**Figure 8d**

*FiPS Scores Items 41-53*



## Interviews

Interviews regarding participants' own financial situation were conducted with three participants. Based on these interviews, five themes were identified: assistance from others, positive aspects, negative aspects, finances and the internet, and the management of finances.

The theme 'assistance from others' encompassed topics such as support from professionals like receivers or local authorities, as well as aid from family members. The participants with MID had varied reasons and preferences regarding who they chose to assist them with their finances. One participant with MID had expressed a preference for professional assistance to avoid potential disagreements with his parents. In contrast, another participant with MID appreciated having her mother manage her finances, as it provided a sense of security. Some participants received help only in specific financial situations, while others received assistance for nearly all financial matters.

*"I'm very satisfied with how we arranged it. And with how we have agreed that my mother is going to look how much I have. That is very nice, that she does this." (Participant 4)*

*"I had the choice to have it done by my parents or by a receiver. I don't have such a good relationship with my parents, and I just knew if we start talking about money then you just get more tension, so I thought, let's just leave them alone with that. So, because of the tension, I chose a receiver instead of my parents." (Participant 2)*

The theme 'positive aspects' encompassed subjects such as saving money, making financial considerations, and participants' strengths related to their finances. The participants with MID had varying approaches and reasons for saving money. All participants with MID had mentioned that they were cautious about their spending habits. In particular, they made careful considerations when deciding which products to purchase at the supermarket. Some strengths highlighted by the participants with MID included their ability to make such

thoughtful considerations, their capability to handle certain aspects of their finances independently, and having sufficient funds to cover their expenses throughout the week.

*“Because I also want to travel by train. Sometimes I really have to weigh something up, I want to take the train next weekend. What can I still buy during the week?”*

*(Participant 2)*

*“I look very consciously at the prices, and I also regularly look online where I can buy the cheapest groceries.” (Participant 2)*

The theme 'negative aspects' encompassed subjects such as debts, inflation, and participants' financial weaknesses. None of the participants with MID were in debt, a fact they were quite proud of. One participant with MID had experienced debt in the past but had managed, with the assistance of his receiver, to repay all the debts. The participants with MID mentioned struggling with inflation. They found it challenging to afford all the necessary items due to the increasing costs. A weakness highlighted was the difficulty in comprehending financial matters, a challenge that participants with MID had faced.

*“I just wanted to be successful in everything, so I saw something on the internet about multi-level marketing, network marketing with a company and all these other little companies. So, I started doing that and I just bought products to stay on that level and I wanted to sell the products, but I couldn't do that at all. I wasn't savvy and articulate at all, so I kept buying products until I was €5,000 in debt.” (Participant 2)*

*“I find it quite difficult. And that also has to do with the prices. Prices keep getting higher. It all gets more and more expensive and more expensive and at a certain point, then you have an overview of what you normally get in your pocket money account, you have lost that a bit.” (Participant 4)*

The theme 'finances and the internet' encompassed subjects such as online purchasing and safety concerns. Some participants with MID had preferred to make purchases online due to the convenience it offered. Conversely, others opted for buying products in physical stores. This preference stemmed from a lack of familiarity with online shopping processes or a desire, for instance, to try on clothes before buying them. The majority of participants with MID preferred using cards for payments rather than cash. They justified this choice by stating that it was more convenient and safer to use cards.

*“It's easy, it's delivered to your home, you don't have to go into town. And I can walk less well at the moment. And I do think I know what I'm doing.” (Participant 4)*

*“So it is for your own safety that it is simply in the bank account and that there is a limit to the amount to be withdrawn.” (Participant 2)*

The theme 'management of finances' encompassed subjects such as autonomous financial management, inquiries about finances, and financial counselling. Participants with MID expressed pride in their ability to independently make certain financial decisions, such as how to allocate their pocket money. When faced with financial queries, participants with MID typically sought advice from individuals they trusted. They observed that caregivers often tended to avoid addressing financial matters due to their perception of the subject's complexity. One participant with MID proposed that caregivers should receive additional training to better handle financial inquiries from their clients.

*“I'm happy that I can manage the pocket money account myself again, and that I can manage myself every week.” (Participant 4)*

*“You see attendants every day and a receiver is available from 9 to 5 during the week, while the questions usually come on Friday evening. Then it's nice to have an attendant who knows: this is the situation, that's how I have to deal with it.” (Participant 2)*

During the interviews, participants with MID were requested to assess their individual financial situations on a scale from 1 to 5. One participant with MID assigned a rating of 4 to their personal financial situation, citing that the current state was satisfactory but desiring more wealth. Another participant with MID rated their financial situation a 3, considering it an average standing. The final participant with MID awarded a score of 5 to his personal financial situation, expressing contentment with their favourable circumstances.

### **Discussion**

The present study aims to examine whether the FCAI, FDMI, and FiPS are applicable in the Dutch MID population. Additionally, the present study aims to expand the current knowledge about the financial capabilities of people with MID. During the assessment, there were no indications to suggest that the assessments were not valid.

Regarding the applicability of the instruments used in this study, the results indicate that with minor changes, the instruments can be used in people with MID. These changes include changing the negatively formulated questions in the FiPS so that they become positively formulated. Visual displays of the answer scales are added. It is also stressed at the beginning and the end of the assessment how difficult finances can be. Finally, the instruments need to become more accessible for people who have visual impairments.

With regard to the financial capability of people with MID, several points stand out. People with MID have more difficulty with specific knowledge about finances, setting financial goals, and they are not fully aware of their personal financial situation. Overall, people with MID have difficulties with understanding several financial problems. Out of the interviews, five themes are suggested regarding the financial capability of people with MID; assistance of others, positive aspects, negative aspects, finances and the internet, and management of finances. The participants with MID have each developed their personalized financial systems. Within these systems, they enjoy the autonomy to make decisions

independently. This not only hones their financial skills but also plays a role in shaping their self-esteem. Research indicates that the value of money goes beyond its tangible form and extends to its social and self-worth dimensions. The ability to receive and manage money contributes significantly to one's sense of self-worth (Albers & Kremer, 2020). Consequently, the freedom to exercise independent financial decision-making, while operating within a safety net, holds importance for enhancing self-worth among participants with MID and others in the same category. This is illustrated in the instance of a participant with MID who takes pride in managing her own pocket money. Similarly, another participant with MID finds a source of self-worth by collaborating on financial decisions with his receiver.

Remarkable is that there are some inconsistencies in the answers provided by the participants with MID. For instance, on the FiPS participants with MID indicate that they know what their sources of income are (item 14), but when asked on the FCAI about their sources of income (item 9), almost all participants with MID are not able to answer the question sufficiently. Also, the participants with MID indicate that they are able to set long-term financial goals (item 30), but this is not indicated on the FCAI (item 15). As the FCAI represents financial competence and the FiPS represents financial performance, it could be said that there is a discrepancy between financial competence and financial performance. This discrepancy can be explained by the contextual factors that also influence financial capability. The help they receive can compensate for the lack of financial competence and therefore lead to a higher financial performance.

There is not much literature on this topic, but the literature that does exist has similar outcomes as the current study. An Australian study using the FCAI (Kershaw & Webber, 2008) concluded that people with an intellectual disability show impairments on the FCAI as compared to people without intellectual disabilities. This study shows this pattern as well. Overall, the control group scores higher on the FCAI and they also are more consistent with

their higher scores. The scores of the MID group are more capricious, going from high to low. A study by Suto and colleagues (2005) examines the performance of people with an intellectual disability on the FDMI. They conclude that the scores of people with an intellectual disability are significantly lower than the scores of the control group. Specifically, the more difficult the decisions become, the worse the performance of the people with an intellectual disability is. This is shown in this study as well. The more difficult the decisions become, fewer participants with MID are able to answer the questions, and over all their scores are lower than the scores of the control group.

### **Limitations**

When exploring the results of the present study, it was important to keep in mind that the sample size of the study was small. Only three participants with MID completed both the quantitative and qualitative assessments. Therefore, the results that were found in this study need to be interpreted with caution. No conclusions could be made based on this study, and the information in this study should only be used to guide further research.

In the present study, difficulties were encountered regarding the establishment of MID. For only two participants with MID, access to the record of the participant was provided to check whether they were diagnosed with MID. Therefore, it was not possible to get a classification out of the record for the remaining three participants with MID, as there was no access to their records.

A different limitation that occurred in this study was that one participant was not able to read some of the materials included in the assessment because the letters were too small. Although this was an exclusion criterion in the study, research showed that visual impairments have a higher prevalence in people with an intellectual disability than in the general population (van Splunder, et al., 2006). Therefore, visual impairments should have been taken into account, and it is recommended that adaptations are made to the materials.

A final limitation of the study was that the control group used to compare the MID group in the FCAI and FDMI consisted of German people. It was questionable whether the data of the control group matched the Dutch population. Because it was not expected that there were major differences between the Dutch and the German population, the data was used. Despite this, the results needed to be interpreted carefully as generalizability to the Dutch population was not assured.

### **Conclusion and recommendations**

This study explores the financial capability in people with a MID. However, with the notion that this study is a pilot study, additional research should be done to further examine this topic. Despite that, some preliminary conclusions can be made in this study. With regard to the first research question, whether the FCAI, FDMI, and FiPS are applicable to the Dutch MID population, it can be said that those instruments are applicable when some minor changes are made. All the participants with MID were able to complete the assessment with those instruments. During the assessment, there are no indications to suggest that the assessments are not valid. The financial capability of people with MID in general is lower compared to the financial capability of people in the general population. Some parts of financial capability stand out, like specific financial knowledge, setting financial goals, and knowledge about their own financial situation. Also, a discrepancy is found between financial competence and financial performance, which possibly can be explained by contextual factors. Further research should focus on expanding the current data by enlarging the sample size. But also, the experiences of practitioners or supervisors should be examined. They view the people with MID in a different fashion than the people with MID see themselves. This can shed a different light on the financial capabilities of people with MID, and therefore broaden the knowledge. Another recommendation for future research is that people with MID with larger capital should be taken into account. There are also people with MID who, for instance,

received a heritage, and therefore have large amounts of money in the bank. These people do not always receive any form of counseling, and at the same time are vulnerable to financial abuse. By including these people, the insight into the financial capabilities of people with MID will be more complete. This could, hopefully, in the end, result in a broader overview of the financial capabilities of people with MID and could guide the people with MID to be more self-sufficient when it comes to finances.

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## Appendix A

### De huidige financiële situatie

- “Hoe vindt u dat het gaat met geld?”
- “Wat zijn uw sterke kanten als het gaat om omgaan met geld? Wat gaat er goed?”
  - o Vraag om concrete voorbeelden
- “Wat zijn uw zwakke kanten als het gaat om omgaan met geld? Wat gaat er minder goed?”
  - o Vraag om concrete voorbeelden
- “Maakt u zich wel eens zorgen over geld?”
  - o “Waarover maakt u zich zorgen?”
  - o “Waarover maakt u zich geen zorgen?”
- “Als u een cijfer zou moeten geven van 0 (heel slecht) tot 5 (heel goed), welk cijfer zou u uw huidige geld situatie geven?”
  - o “Waarom dit cijfer?”
  - o “Waarom niet -cijfer hoger-?”
  - o “Waarom niet -cijfer lager-?”

### Financiële verantwoordelijkheid

- “Wie beheert uw geld?” *deze informatie weet je al uit voorafgaande instrumenten, dus vraag de mening van de participant hierover uit*
  - o “Hoe gaat dit?”
  - o Voordelen aan zelf/door anderen geld beheren
  - o Nadelen aan zelf/door anderen geld beheren
- “Heeft u wel eens problemen met geld?”
  - o Vraag om concrete voorbeelden
  - o Vraag door over de aard van de financiële problemen
- “Zijn er ook dingen met uw geld die wel goed gaan?”
- “Spaart u ook geld?” *deze informatie weet je al uit voorafgaande instrumenten, dus vraag de mening van de participant hierover uit deze informatie*
  - o “Waarvoor/waarom spaart u?”
  - o “Is sparen makkelijk voor u?”
- “Hoe is het voor u om keuzes te maken over uw geld, bijvoorbeeld waar u het aan uitgeeft?”

- Noem hierbij concrete situaties, zoals boodschappen doen of rekeningen of huur betalen
- Vraag ook over aankopen vergelijken en budgetteren
- “Koop u ook wel eens spullen op het internet?”
  - “Wat voor spullen?”
  - “Hoe betaalt u die?”
    - Denk aan: Ideal, AfterPay, Incasso
  - “Koopt u liever spullen in de winkel of op het internet?”
    - Waarom?

**Steun** *Deze informatie weet je al uit voorafgaande instrumenten, dus vraag de mening van de participant hierover uit*

- “Zijn er mensen die u helpen met uw geld?”
- “Weet u aan wie u hulp kunt vragen als u problemen hebt met uw geld?”
- “Weet u van het bestaan van programma’s vanuit bijvoorbeeld de gemeente om u te helpen met uw geld?”
  - “Maakt u daar gebruikt van?”
- “Als u hulp vraagt voor uw geldzaken, waarvoor is dit dan?”

### **Rol van geld**

- “Hoe belangrijk is geld voor u?”
  - Waarom?
- “Hoe vindt u het om over geld te praten?”
  - Wat is er makkelijk/moeilijk?
  - Praat u erover met anderen?

### **Tips**

- “Heeft u nog tips voor andere mensen die in dezelfde situatie als u zitten?”
- “Heeft u nog tips voor begeleiders als het gaat om het onderwerp geld/financiën?”

