



Use and usefulness of information sources as an indicator for information deficits in university students

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INTRODUCTION

- The majority of German university students cited false study expectations as a major reason for dropout (Mouton, Zhang, & Ertl, 2020; Heublein et al., 2010).
 - Cited as indirect evidence of “Information deficits” at the beginning of studies (Klein & Stocke, 2016)
 - Based on “Informedness” (Blüthmann, Thiel, Wolfgramm, 2011)
- Career decision-making theory explains the process of gathering and evaluation of various sources of information (Gati, Krausz & Osipow, 1996)
- Lack of information is a major cause of career decision making difficulties (Kelly & Lee, 2002), which may lead to making a non-optimal career decision (Kulcsár, Dobrean & Gati, 2020).
- Students who engage in more information seeking can indirectly increase their study satisfaction (Pesch, Larson & Seipel, 2018).
- In addition, students who avoid using any source of information are more likely to change their major (Vertsberger & Gati, 2015).
- Heine, Willich and Schneider (2010) investigated information sources used by German students planning their transition to university with a similar questionnaire available in NEPS.
- This study will investigate use the of information sources or the lack thereof, and whether levels of informedness can indicate information deficits by comparing key contextual variables.

METHOD

Sample

The sample consisted of 17910 German university students from NEPS (SC5:14.0.0; see Blossfeld, Roßbach, & Maurice, 2011) were used to better understand the information deficit hypothesis.

Measures

Useful Information Sources – questionnaire by Heine, Willich & Schneider (2010) includes 15 information sources.

Overall well prepared for university studies – single item (Lörz, Quast & Woisch, 2012).

Study satisfaction – an eight-item aggregate measuring general study satisfaction, as well as satisfaction with a particular course (Westermann, Elke, Spies, & Trautwein, 1996).

Grade Point Average (GPA) – German University GPA after one year.

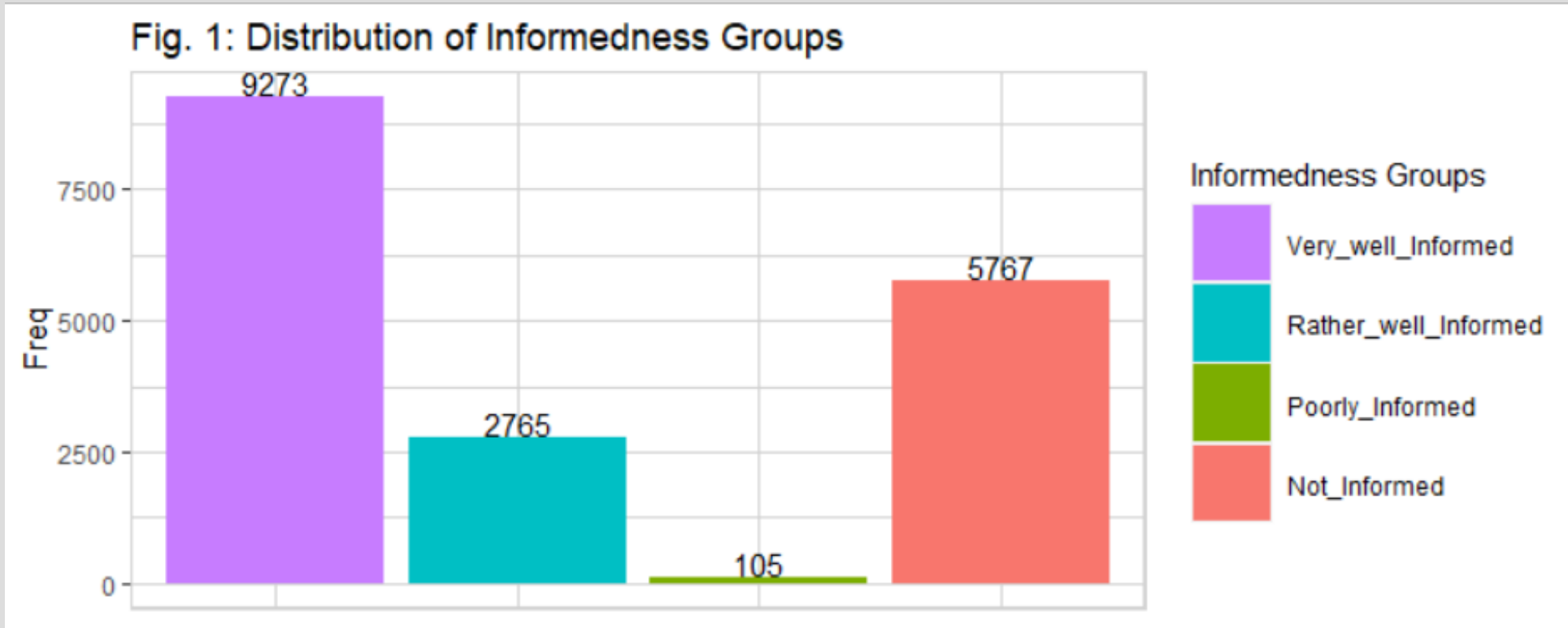
Intentions for Dropout – five item aggregate on after one year (Bean, 1985)

Reasons for Dropout (False Study Expectations) – single item from questionnaire based on the extent to which students think the specific item is an important reason for their dropout (Heublein et al., 2010).

Analysis

Actual use rate

- The percentage of students who use an information source as compared to the whole sample (Vertsberger & Gati, 2015).



Levels of Informedness

- The Useful Information Sources’ scale (1- not helpful at all to 4 - very helpful) was used to group students based on how useful sources were to make their study decision.
- Four groups (Fig. 1): (1) Very well informed (51.8%), (2) Rather well informed (15.4%), (3) Poorly Informed (.6%), (4) Not informed (32.2%)
- A student who found at least one source very helpful was included in group (1), a student who found at least one source rather helpful in group (2). Any student who found any source less than rather helpful was in group (3). All other students were in group (4).

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RESULTS

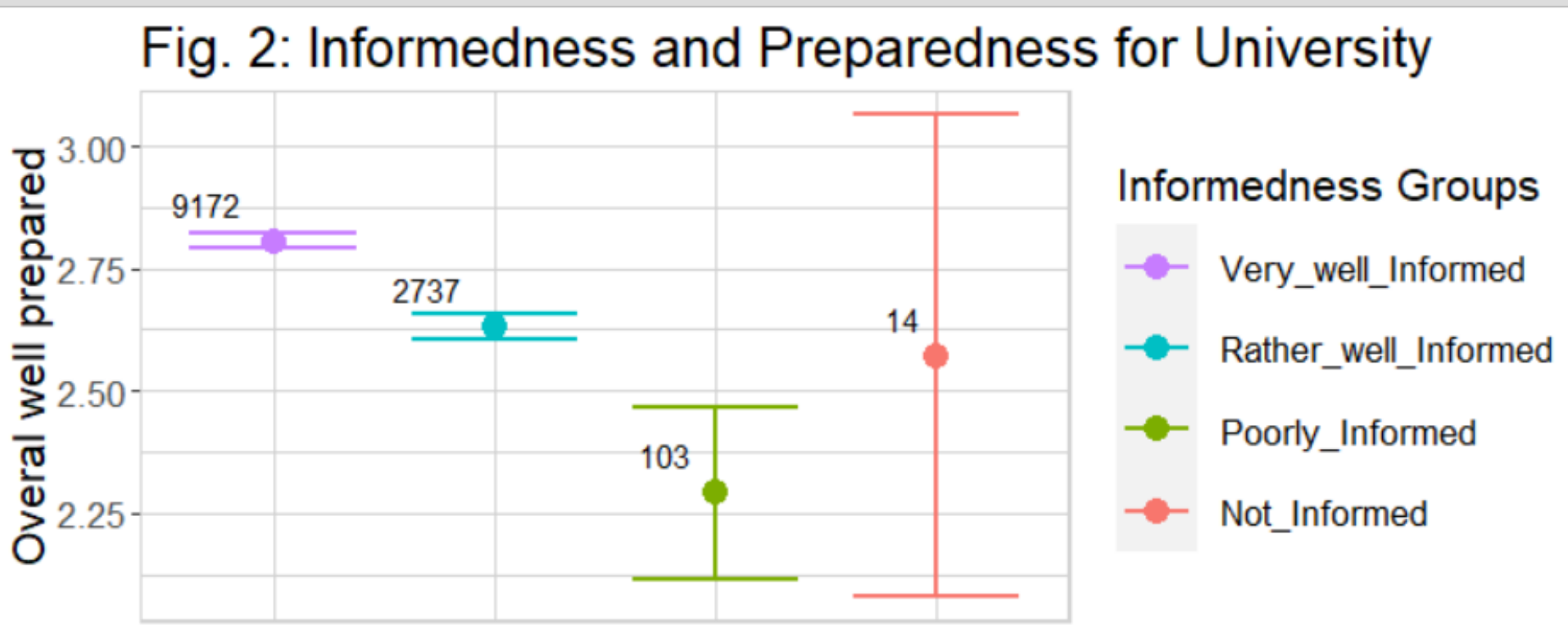
Use and Usefulness of Different Information Sources

Table 1: The rate at which students used different sources of information and their perceived usefulness (N = 17910).

Information category	Information sources used	Use rate %	Perceived usefulness M(SD)
	None	*32.2	-
Media in general	1 Media	60.6	2.83 (.89)
	2 Literature	59.8	2.91 (.83)
Personal environment	3 Parents	58.8	2.78 (.90)
	4 Friends	58.8	2.77 (.79)
General Information	5 School teachers	45.2	2.31 (.95)
	6 School events	50.6	2.18 (.85)
	7 Job agency	36.7	1.99 (.94)
University-related information	8 University students	50.6	3.04 (.81)
	9 University info days	46.4	2.97 (.83)
	10 University advice services	40.2	2.73 (.87)
	11 University trial study	16.8	2.53 (1.02)
Career-related information	12 Professionals	46.9	2.98 (.89)
	13 Companies	22.3	2.26 (.97)
	14 Professional associations	13.4	1.77 (.85)
	15 Other [†]	4.5	3.50 (.83)

Note. Perceived Usefulness M(SD) = Mean and Standard Deviation of usefulness scale (1) “Not very useful” to (4) “Very useful”. Use rate % = Percentage of students who used the information source. *Students with “Information sources used” labelled “None” either used none of the sources or they were not offered any of the sources.[†]The “Other” source was not identified in the available NEPS data

Levels of Informedness



Better informed students indicated that they were better prepared for university overall (Fig. 2).



Although very well informed students were most satisfied with their studies, students who were not informed were more satisfied with their studies than their rather well informed counterparts (Fig. 3).



Better informed students had better grades than their less informed counterparts. Almost none of the not informed students provided an grades after one year (Fig. 4).

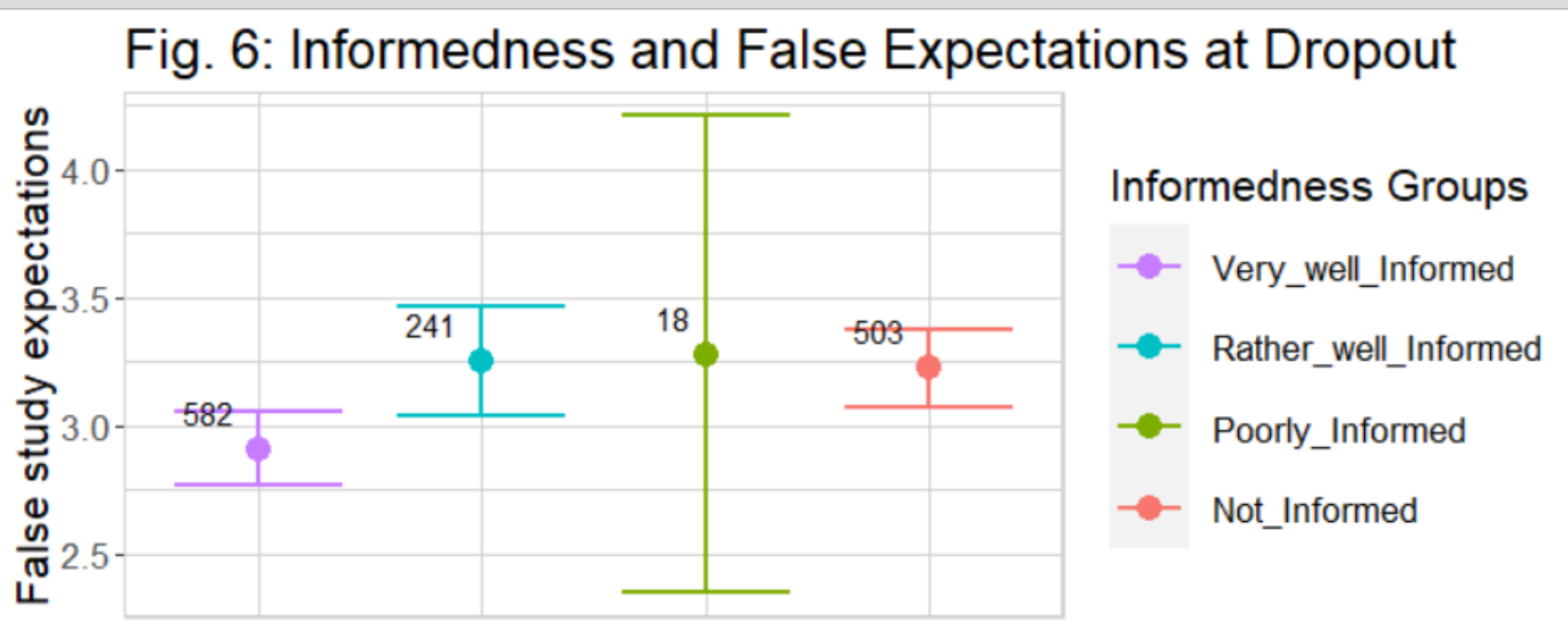


The less well informed students had greater intentions to dropout than their better informed counterparts (Fig. 5).

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RESULTS



Very well informed students present the lowest score on false expectations as a reason for dropout. The rather well informed students present similar levels of false expectations at dropout as their not informed counterparts (Fig. 6).

DISCUSSION

- As previously found by Heine, Willich and Schneider (2010), different sources were not used at a uniform rate, however, all sources were treated equally for informedness groups, only differentiated by usefulness.
- The percentage of students who did not use any source of support (i.e. “Not Informed”) is more than 4-times higher than that found in similar study (Vertsberger & Gati, 2015)
- The trend amongst the informedness groups who used information sources were as expected,
 - Better informed students presented more favourable outcomes than poorly informed students.
- Interestingly, “Not Informed” students presented a better study satisfaction than the “Rather Well Informed” students, which is contrary to models on career exploration (Pesch, Larson & Seipel, 2018).
- Unfortunately, “Not Informed” students did not provide enough information on other variables to allow further interpretations.
- Only “Very Well Informed” students presented a lower score on false study expectation as a reason for dropout.

CONCLUSION

Students who are not completely satisfied with the usefulness of any information source used for planning their studies show similarly poor outcomes as their poorly informed or uninformed counterparts, This study suggests that students who are not optimally informed show evidence of information deficits.

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