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Dec 11th, 12:00 AM

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#### Recommended Citation

Adam, Martin; Wiener, Martin; and Benlian, Alexander, "Online Labor Platforms and the Role of Job Security and Compensation (Mis)Fits for Gig Workers" (2023). *Rising like a Phoenix: Emerging from the Pandemic and Reshaping Human Endeavors with Digital Technologies ICIS 2023*. 2.

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# **Online Labor Platforms and the Role of Job Security and Compensation (Mis)Fits for Gig Workers**

*Completed Research Paper*

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## **Abstract**

*Online labor platforms (OLPs) use algorithms to manage their workers. Prior research has examined how OLP management shapes workers' attitudes, implicitly assuming that workers have the same preferences. However, research has largely neglected the role of (mis)fits between what workers need and what they receive from OLPs. Therefore, we conducted a survey with 121 Mechanical Turk workers and used polynomial regression analysis of workers' actual needs and perceived OLP supplies. Our results suggest that higher job security fit decreases perceived exploitation and increases system satisfaction, whereas higher compensation fit decreases perceived exploitation. In addition, we find that job security misfit has decreasing marginal effects on perceived exploitation and increasing marginal effects on system satisfaction. Overall, we contribute to a more nuanced understanding of workers' reactions to the design of OLPs by shedding light on the interplay between what gig workers need and what they perceive to receive from such platforms.*

**Keywords:** Online labor platforms, gig work, gig economy, response surface analysis, person-organization fit

## **Introduction**

In recent years, labor markets have undergone significant changes as platform-based 'gig' work has gained in importance. Gig work broadly refers to forms of freelance, short-term employment, often limited to the performance of a certain task (Barley et al., 2017). Advancements in information technology support this development with the emergence of online labor platforms (OLPs). OLPs, such as the crowdsourcing platforms MobileWorks and Amazon Mechanical Turk (MTurk), match people who are willing to provide a certain type of work with requesters of such work and automatically settle necessary transactions. This type of work is widespread: In 2021, 16% of all adults in the U.S. have ever earned money from an OLP and 9% of U.S. adults worked on such a platform in the past year (Anderson et al., 2021). Also, OLPs are growing fast: In 2018, the global gig economy had a gross volume of 204 billion US-dollars; by 2023, it is expected reach a volume of about 455 billion US-dollars (Mastercard and Kaiser Associates, 2019).

As online labor is gaining in popularity, it is important to examine the relationship between gig workers and OLPs. Previous research focused on the influence of algorithmic management mechanisms applied by OLP owners on gig workers. These mechanisms automatically support finding beneficial matches between workers and requesters and therefore facilitate transactions (Gawer, 2014; Möhlmann et al., 2021), but also exert control over worker behaviors to assure that they conform with the OLP provider's objectives (Benlian et al., 2022; Jiang et al., 2021; Wiener et al., 2016). Several studies have shown that the design of an OLP's algorithmic control and matching mechanisms has a large influence on the perceived level of job security and compensation the workers receive (e.g., Deng et al., 2016; Möhlmann et al., 2021; Rosenblat and Stark, 2016) and thus on the workers' well-being and behaviors (Cram et al., 2022). For example, OLPs provide information about available tasks for matching workers and task requesters, thus influencing the workers' ability to determine if the compensation is high enough to make a task profitable (e.g., Rosenblat and Stark, 2016). Another example are control mechanisms that are related to job security, which can be used to sanction undesirable behaviors and thus threaten the workers' potential to work on the OLP in the future (e.g., Wiener et al., 2021). Depending on whether such design decisions support or hinder workers to gain sufficient job security and compensation, they either experience feelings of empowerment or marginalization (e.g., Deng et al., 2016; Möhlmann et al., 2021). These feelings can influence workers' system (i.e., OLP) satisfaction and ultimately their behaviors, such as switching to a different OLP (Möhlmann et al., 2021). In cases of great divergence, workers can even perceive to be exploited with severe consequences not only for workers (e.g., mental distress, impoverishment, and precarity) but also particularly for the OLP (e.g., higher workers' intention to game the OLP) (Livne-Ofer et al. 2019; Spiekermann et al. 2022). For example, workers game the OLP by strategically logging on and off the platform. With that, they manipulate the OLP's information concerning the current supply in the market and therefore the drivers' compensation (Möhlmann et al., 2021). For this reason, avoiding feelings of exploitation and increasing system satisfaction among gig workers should be a central concern of OLP providers.

While a growing body of research emerges that examines the effects of management mechanisms on worker attitudes and intentions (e.g., Cram et al., 2022; Möhlmann et al., 2021; Wiener et al., 2021), only few studies explicitly considered worker needs, such as job security and compensation (e.g., Deng et al., 2016). These studies however overlooked the impact of (mis)fit between workers' actual needs and the perceived supplies from OLPs. Gaining insights on job security (mis)fits and compensation (mis)fits is important because workers engage in OLPs for diverse reasons: While some engage just to pass the time, others are dependent on the income provided by gig work (e.g., Deng and Joshi, 2016). Therefore, we believe that workers have different needs concerning the degree of job security and compensation, as well as differing perceptions about the extent to which OLPs provide these resources. Due to the typically high obscurity and incomprehensibility of algorithmic management mechanisms (e.g., Kellogg et al., 2020; Möhlmann et al., 2021; Rosenblat and Stark, 2016), we assume that workers' perceptions regarding what is supplied by the OLP mostly develop after working on an OLP for a certain period. The (mis)fit between workers' actual needs and the perceived supplies by the OLP has critical consequences for workers' perceived exploitation and system satisfaction. Against this backdrop, we propose to answer the following research question:

*RQ: How do job security (mis)fit and compensation (mis)fit between workers' needs and OLPs' supplies influence workers' perceived exploitation and system satisfaction on OLPs?*

To address this research question, we drew on person-organization fit theory and conducted a survey among 121 workers from MTurk. Our results reveal that job security and compensation (mis)fits indeed do matter and have complex relationships with perceived exploitation and system satisfaction. With our research, we mainly contribute in two important ways to the digital platform management literature (Cameron and Rahman, 2022; Davidson et al., 2023; Möhlmann et al., 2023). First, research about OLPs is often based on the assumption that all gig workers have the same needs that must be supplied by the OLP (Cram et al., 2022; Möhlmann et al., 2021; Wiener et al., 2021). However, as explained above, the level of needs differs widely from worker to worker and thus require individual levels of supplies to create fit (e.g., Davidson et al., 2023; Deng and Joshi, 2016; Ross et al., 2010). We therefore examine workers' individual (mis)fits regarding how much job security and pay they need and how much they perceive to be supplied with by the OLP. Second, by integrating the dimension of perceived exploitation in our model, we examine the ethical implications of (in)sufficient consideration of gig workers' needs. Beyond these theoretical contributions, this study provides insights for OLP providers to detect and counteract potentially relevant perceptions of negative misfits.

## **Theoretical Background**

### ***Person-Organization Fit in the Context of Gig Work***

Person-environment fit theory states that an individual's behavior results from his or her compatibility with the environment (Kristof-Brown et al., 2005; Schneider, 2001). In the context of work, for example, scholars have studied the effects of fit between workers and their occupations (e.g., Spokane, 1985), jobs (e.g., Edwards, 1991), supervisors (e.g., Adkins et al., 1994), work groups (e.g., Kristof-Brown and Stevens, 2001), and organizations (e.g., Cable and Edwards, 2004). In particular, person-organization (PO) fit examines how similar individual's needs are to their organization's supplies (Chatman, 1989). There can be a fit (i.e., needs and supplies are equal), a negative misfit (i.e., supplies are insufficient to meet the needs) or a positive misfit (i.e., supplies exceed the needs). Fit is expected to have a beneficial influence on an individual's attitude towards an organization (Edwards and Cable, 2009), while misfit is often assumed to be detrimental to the relationship (Cable and Edwards, 2004).

Although OLPs act as an intermediary between workers and requesters instead of directly employing the workers as in traditional organizational contexts (e.g., Benlian et al., 2022; Jiang et al., 2021; Möhlmann et al., 2021), we believe that the design of the OLP (e.g., the matching between workers and requesters and the control mechanisms applied by the OLP) influences the degree to which workers are supplied with certain resources which may or may not fit with worker needs. For example, OLPs regularly deactivate accounts of workers whose customer ratings are below the market average, which many workers dislike because it causes uncertainty regarding their long-term work opportunities (Rosenblat and Stark, 2016). Therefore, it does not fit with their needs for job security. On the other hand, OLPs often automatically allocate tasks to available workers. This aspect is often considered positively by workers, as they see it as a way to continuously receive profitable job opportunities without having to advertise themselves to the customers (Cameron and Rahman, 2022; Möhlmann et al., 2021; Möhlmann et al., 2023). Thus, OLPs request allocation fits with the workers' needs for job security. For this reason, we assume that the fit between a worker's actual needs and the perceived OLP supplies, as in PO fit theory, helps predict a worker's attitudes and intentions towards the OLP. Hence, we base our research model on the PO fit concept.

For the OLP context, we focus on job security and compensation as the aspects of interest for PO fit. We define job security as the importance attached to work stability (Johnson, 2002) and compensation as the importance attached to financially remunerate the workers for their contribution. We have chosen these dimensions because several qualitative studies have identified job security and compensation as some of the focal aspects for workers of many different OLPs, for example ride-hailing platforms such as Uber (Möhlmann et al., 2021; Rosenblat and Stark, 2016), crowdsourcing platforms such as MTurk (Deng et al., 2016; Deng and Joshi, 2016) and food-delivery platforms such as Deliveroo (Goods et al., 2019). This indicates that job security and compensation are fundamental aspects of appraisal for relationships between workers and OLPs, irrespective of the specific OLP type or work conducted. Additionally, these two aspects are important because security is one of the most potent needs (Porter, 1961) and money a means for satisfying important psychological and physiological needs (Howell et al., 2013). Although job security and compensation are also relevant for traditional employment relationships (e.g., Cable and Edwards 2004), we consider them to be especially focal for gig work due to the flexible work structures. Indeed, organizations have many benefits that provide a minimum level of job security and compensation, which are often taken for granted, but mostly do not exist on OLPs. Amongst others, these include the provision of a holding environment for workers (Petriglieri et al. 2019) with employment contracts lasting longer than a single task (Friedman, 2014) and the provision of an acceptable compensation due to minimum wage laws (Todolí-Signes, 2017). As OLP workers tend to be averse to these aspects, they may be more sensitive to how important job security and compensation are to a particular OLP and what the OLP does to ensure them.

Regarding the outcomes, we identified two important dimensions that could be influenced by the (mis)fit between the worker's job security and compensation needs and the related perceived supplies from the OLPs: perceived exploitation and system satisfaction. Perceived exploitation is defined as the workers' perceptions of being intentionally taken advantage of in the relationship with the employing organization for the organization's benefit (Livne-Ofer et al. 2019). For instance, feelings triggered by perceived exploitation promote revenge against the organization and reduce commitment and engagement (Livne-Ofer et al., 2019). It is therefore in the OLP owner's own interest to reduce such perceptions of exploitation.

For this reason, we think it is important to explore in what way the relationship between workers and OLPs leads to perceived exploitation. System satisfaction has been described as the “degree of favorableness with respect to the system and mechanics of interaction” (Wixom and Todd, 2005). It is one of the key metrics for IS success (Delone and McLean, 2003). In the following, we further discuss why and how job security and compensation (mis)fit between workers’ needs and OLP supplies can influence these outcomes.

## **Research Model and Hypothesis Derivation**

### ***Influence of Job Security and Compensation Fit***

Research in PO fit suggests that when employees’ needs fit with the organization’s supplies, they have a positive attitude towards the organization, such as higher satisfaction with their jobs and lower intention to quit (Kristof-Brown et al., 2005). There are several reasons why such a fit is positive for the employee. For example, a fit promotes trust as the alignment fosters beliefs to not be harmed by the organization, it facilitates communication as it implies that both share common standards, and it leads to higher attraction of the organization since interactions with similar others are more pleasurable (Edwards and Cable, 2009).

Similar to fit in organizational settings, we assume a fit between a worker’s needs and OLP’s supplies regarding job security and compensation to be beneficial, that is to have a negative effect on workers’ perceived exploitation and a positive effect on their system satisfaction. If workers perceive that the OLP provides as much job security and compensation as workers need, they will be more likely to perceive that the OLP fulfills its duties in the relationship with the workers (Lu et al., 2017). Consequently, workers see their contributions and the OLP’s contributions to the relationship as being equal (Conway and Coyle-Shapiro, 2012), which means that the OLP apparently does not exploit its workers. Additionally, studies show that satisfactory levels of job security and compensation result in lower levels of stress and negative feelings and higher levels of satisfaction with the work and organization (e.g., Covin et al., 1993; Greenhalgh and Rosenblatt, 1984; Tremblay and Roussel, 2001). Since workers almost exclusively interact with the system provided by the OLP during work (Möhlmann and Zalmanson, 2017), we anticipate a similar effect for the satisfaction with the OLP.

However, we assume that these effects are not only determined if there is a fit between the workers’ needs and the OLP’s supplies, but also if the fit is on a rather low or rather high level. Although in both cases the worker’s needs are met, we hypothesize that fit on a low level has a less negative effect on perceived exploitation and does not provide as much satisfaction as fit on a high level. Workers must actively accumulate special resources to “survive” the potentially low level of job security or compensation provided on OLPs and to take the full advantages of this type of work. For example, workers operating in environments of high uncertainty must develop resilience against disturbances and show proactivity to effectively deal with them, persistence in order to recover quickly from setbacks, engage in bricolage to accomplish critical goals and create social support systems as connecting with other workers and friends and family who can provide emotional support and possibly financial buffer in case of turbulences (Ashford et al., 2018). To sum up, working for OLPs that provide low supplies of job security or compensation demands more from workers than working for an OLP with high supplies. Therefore, we suspect that such workers tend to have less success with avoiding stress and negative feelings, leading to a higher perception of being exploited and lower satisfaction with the OLP. Thus, we propose:

**H1: (a)** Workers’ perceived exploitation will be lower and **(b)** workers’ system satisfaction will be higher if job security needs and supplies fit at a high level than when they fit at a low level.

**H2: (a)** Workers’ perceived exploitation will be lower and **(b)** workers’ system satisfaction will be higher if compensation needs and supplies fit at a high level than when they fit at a low level.

### ***Influence of Job Security and Compensation Misfit***

Although literature about PO fit often assumes that misfit is generally detrimental to the relationship (Cable and Edwards, 2004), in many contexts the actual effects are dependent on the types of misfit (e.g., Kristof-Brown et al., 2005; Maruping et al., 2019). For this reason, we consider the situations of negative misfit (i.e., supplies < needs) and positive misfit (i.e., supplies > needs) separately.

We believe that negative misfit increases workers' perceived exploitation. Exploitation in a relationship arises from structural power asymmetries between the parties (Livne-Ofer et al., 2019). Feeling powerless is one important aspect of perceiving a job as insecure (Greenhalgh and Rosenblatt, 1984). Thus, we expect workers who think that their job security needs are not met by the OLP to perceive that there is a power asymmetry in their relationship for the benefit of the OLP. Moreover, not meeting workers' job security needs can make workers feel that the OLP has not fulfilled its obligations (Cuyper and Witte, 2006; Lu et al., 2017). Perceiving job insecurity leads to losing faith in the dependability of an organization and therefore lowers workers' trust in the organization (Ashford et al., 1989). We assume a perceived power asymmetry in favor of the OLP to encourage the perception that the OLP purposefully provides unsatisfactory job security for its own benefit. Additionally, since insufficient compensation is an important aspect of exploitation (Livne-Ofer et al., 2019), we expect workers to be more likely to feel exploited if their needs regarding compensation are not fulfilled. This is in line with previous studies, revealing that MTurk workers who feel that MTurk does not provide enough job security for the workers to get paid for the work they have done report that they feel scammed, and workers who receive lower compensation than they expect call the compensation practice unfair and inhumane (Deng et al., 2016).

Moreover, we propose that a negative misfit in terms of job security reduces workers' system satisfaction. If there is a negative job security misfit, we expect that workers will perceive a higher degree of uncertainty and insecurity regarding their jobs because their needs on job security are not met by the OLP. Perceiving job insecurity causes stress involving fear, potential loss, and anxiety (Greenhalgh and Rosenblatt, 1984). We expect these negative feelings to reduce the satisfaction with the system (i.e., OLP). This is supported by previous studies, demonstrating that the perception of job insecurity negatively affects workers' satisfaction (Ashford et al., 1989). Regarding negative compensation misfit, we expect workers to be dissatisfied with the compensation. Therefore, such workers should also be dissatisfied with the job and the OLP (e.g., Covin et al., 1993; Tremblay and Roussel, 2001). Analogously to the case of fit, dissatisfaction is likely to transfer to the OLP.

For the case of positive misfit, we do not expect a detrimental effect on workers' attitudes or intentions. We cannot identify any disadvantages for a worker if the OLP puts "too much" emphasis on providing job security or compensation. In organizational settings, scholars assume that both cases of misfit have a detrimental effect because the organization's values are reflected on the persons who work there and misfit with the workers' own needs results in cognitive dissonance (Cable and Edwards, 2004; Dutton and Dukerich, 1991; O'Reilly et al., 1991). However, we do not expect that a positive misfit causes cognitive dissonance as hypothesized in organizational settings. Compared to traditional job positions, gig work on OLPs is characterized by individuals working outside of organizations, mostly separated from other workers and the work recipients (Ashford et al., 2018) and often having only impersonal contact to the OLP (e.g., Deng et al., 2016; Möhlmann et al., 2021). This separation is often supported by the OLP's communications that call workers independent contractors instead of employees and promise them to run their own business (e.g., Möhlmann et al., 2021; Rosenblat and Stark, 2016). This should make the workers feel of having much lower affiliation with the OLP than with a regular employer, which was also confirmed by workers in qualitative studies (e.g., Möhlmann et al., 2021). Due to the low identification with the OLP, we assume that workers will pay more attention on the fact if their needs are fulfilled. In such cases, positive misfit often leads to an even better situation for a recipient than fit (Cable and Edwards, 2004). We assume that positive misfit in compensation and job security will lead to such an effect because, as explained before, a higher endowment with these reduces the necessity to accumulate special resources in order to enjoy the full advantages of online labor (Ashford et al., 2018). All taken together, we propose:

**H3:** In case of job security misfit, the less negative or the more positive the misfit is, **(a)** the lower is the worker's perceived exploitation and **(b)** the higher is the worker's system satisfaction.

**H4:** In case of compensation misfit, the less negative or the more positive the misfit is, **(a)** the lower is the worker's perceived exploitation and **(b)** the higher is the worker's system satisfaction.

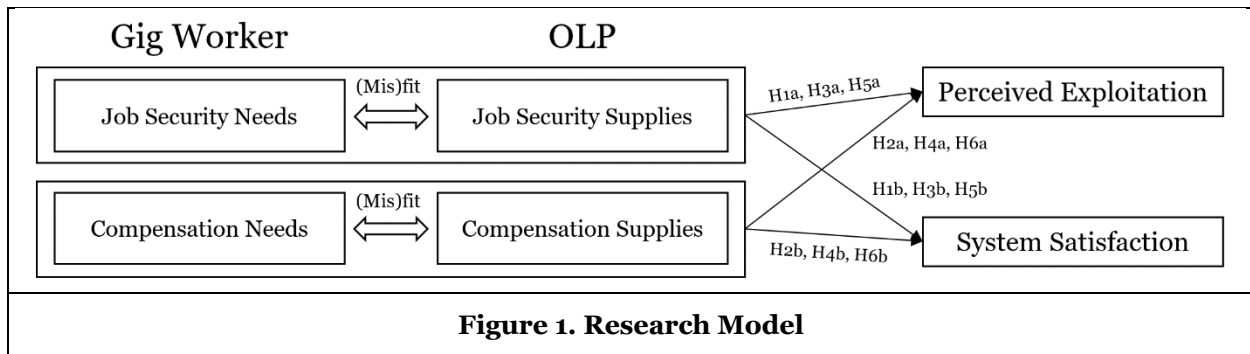
Beyond that, we assume that the type of misfit does not only influence the direction, but also the strength of the effect. For perceived exploitation, we hypothesize that higher negative misfit and lower positive misfit in job security and compensation results in a higher impact on the variable than the other way around. Workers can only perceive to be exploited if they judge their situation themselves as exploitative (Livne-Ofer et al., 2019). We assume that they are more aware of it, the higher the negative misfit is (Ender and Magnusson, 1976) and thus respond more strongly to it in terms of perceiving exploitation. In contrast, in

cases of low negative or even positive misfit, the effect on perceived exploitation is rather small. For system satisfaction, however, we assume that lower negative misfit or higher positive misfit has increasing marginal effects on worker satisfaction. Research has found that satisfaction is influenced more strongly by positive emotions than by negative ones if individuals try to achieve utilitarian goals (such as earning money), since they rather expect negative emotions in such situations, making positive ones more rewarding (Rychalski and Hudson, 2017). As explained before, a negative misfit in job security or compensation is related with emotions as fear or anxiety (e.g., Ashford et al., 1989), whereas in case of positive misfit, workers expressed feelings such as happiness and relief (e.g., Deng et al., 2016; Möhlmann et al., 2021). We thus hypothesize:

**H5:** The marginal effects of job security misfit **(a)** on perceived exploitation are diminishing and **(b)** on system satisfaction are increasing.

**H6:** The marginal effects of compensation misfit **(a)** on perceived exploitation are diminishing and **(b)** on system satisfaction are increasing.

Figure 1 shows the proposed model.



## Methodology

### Research Setting

To test our hypotheses, we conducted an online survey with workers of Amazon Mechanical Turk (MTurk) as an illustrative example of an OLP for micro work, which predominantly comprises data-processing tasks that computers cannot sufficiently fulfill (yet). Workers with Internet access can choose a task provided and receive a small compensation that is determined by the requester beforehand (Irani, 2015). Around 500,000 workers are registered on MTurk, most of them located in the US and India (Kuek et al., 2015), earning an average income of \$3.13 per hour (Hara et al., 2018). Besides video and audio transcription, classifications, and document categorization (Deng and Joshi, 2016), participating in surveys is one of the most prominent types of work tasks on MTurk. Also, we assume that the participants' relationship to the OLP is more salient to them if they fill out our questionnaire between fulfilling other tasks on MTurk. We therefore believe MTurk to be an excellent setting for our research since it enables to survey workers in their "natural work environment" by posting our survey questionnaire as a task on this OLP.

### Survey Instrument and Data Collection

For the data collection, we developed a questionnaire capturing the variables of interest for our study. The first page of the survey explained the purpose of the survey and prompted the participants to think about their interactions with MTurk when answering the questions. It also asked the participants to provide their subjective opinions and guaranteed anonymity of the answers. We adjusted existing items from Cable and Edwards (2004) to measure the perceived needs and supplies regarding job security (e.g., "Being certain of keeping my job on MTurk.") and compensation (e.g., "Total compensation on MTurk."). For each of the items, we measured perceived needs and supplies on commensurate measures (i.e., how much the worker needs and how much the worker perceives that MTurk provides). The participants were asked to rate them on two seven-point Likert scales using "(1) Not at all" and "(7) To an extreme degree" as anchors. One scale was titled with the question "How important is this to you?", the other one was titled with "How important is this to MTurk?", implicating that workers should not only consider how much job security and

compensation they need, but also how important they think it is to MTurk to provide workers with those dimensions. For the dependent variables, we adapted items from Livne-Ofer et al. (2019) for perceived exploitation (e.g., “*MTurk has taken advantage of me for several times.*”) and from Brown et al. (2008) for system satisfaction (e.g., “*I am an enthusiastic MTurk worker.*”). As for the dependent variables, these were rated on seven-point Likert-type scales, mostly ranging from “(1) strongly disagree” to “(7) strongly agree.” Table A1 in the Appendix provides the exact measurement items.

Consistent with previous studies (e.g., Adam et al., 2022; Cram et al., 2022), we captured control variables to control for important alternative explanations and potential confounds. Besides personal information as gender, age, education and average income, we also captured relevant work information: multi-homing (i.e., whether the worker also works for other OLPs), MTurk income (i.e., the average monthly income the worker gets from MTurk), average weekly number of jobs, average weekly number of work hours, tenure (i.e., the number of months the worker has been working on MTurk) and the degree of dependency (i.e., how dependent the worker is on the income provided by MTurk).

To disseminate our questionnaire, we posted it on MTurk. Workers based in the U.S. could accept the task and receive a compensation for answering all items in the questionnaire. We restricted participation to users with a high approval rating (at least 98%), which is considered an appropriate measure to ensure high data quality (Goodman and Paolacci, 2017). Additionally, we implemented attention checks and considered the mean processing time of the survey to filter participants who did not complete the survey carefully or who got distracted (e.g., working simultaneously on other tasks) (Kung et al., 2018). With that approach, we were able to collect 151 fully completed questionnaires, of which 121 remained for the analysis after filtering for missed attention checks and suspicious behaviors (e.g., monotonous answering, skipping questions, long processing times). This sample size is in line with the sample size of previous studies on response surfaces in major IS journals (e.g., Benlian 2013, 2014; Maruping et al., 2019).

### Measurement Validation

For evaluating convergent validity, we used the three criteria by Fornell and Larcker (1981) which consist of all measurement factor loadings being significant and above the threshold value of 0.7, construct reliabilities exceeding 0.8 and the average variance extracted (AVE) by each construct exceeding the variance due to measurement error for that construct (i.e.,  $AVE > 0.5$ ). Due to low factor loadings, we had to remove two items from the system satisfaction and one item from the perceived exploitation dimension. As shown in table 1, the loadings of the remaining measurement factors were above 0.7 and significant (i.e.,  $p < 0.05$ ). Composite reliabilities exceeded 0.8 and Cronbach’s alphas surpassed 0.79. Values for AVEs ranged from 0.582 to 0.882. Consequently, the constructs met the norms for convergent validity.

For ensuring discriminant validity, the square root of AVE from the construct should be greater than the variance shared between the particular construct and the other constructs (Fornell and Larcker, 1981). As shown in table 2, the square roots of AVE exceeded inter-construct correlations and therefore suggest discriminant validity. As an alternative way of assessing discriminant validity, we examined the heterotrait-monotrait (HTMT) ratio of the construct correlations (Henseler et al., 2015). All HTMT values were below the threshold of 0.9. This indicates that the constructs are statistically distinguishable.

Construct	# of items <sup>1</sup>	Item loadings <sup>2</sup>	Cronbach’s $\alpha$	CR	AVE
Job security needs (JSN)	4	0.810 – 0.916	0.911	0.917	0.736
Job security supplies (JSS)	4	0.827 – 0.943	0.945	0.946	0.814
Compensation needs (CN)	3	0.809 – 0.899	0.875	0.878	0.705
Compensation supplies (CS)	3	0.898 – 0.963	0.956	0.957	0.882
Perceived exploitation (PE)	5	0.725 – 0.880	0.876	0.888	0.582
System satisfaction (SAT)	2	0.758 – 0.773	0.792	0.811	0.661

Notes: <sup>1</sup> After removing items with low loadings; <sup>2</sup> All loadings are significant at least at the 0.05 level.

**Table 1. Assessment of Internal Consistency/Convergent Validity**



Construct	Mean	SD	(1)	(2)	(3)	(4)	(5)	(6)
(1) JSN	5.93	1.20	<b>0.858</b>					
(2) JSS	4.32	1.90	-0.018	<b>0.902</b>				
(3) CN	6.16	1.05	-0.332***	-0.184 <sup>†</sup>	<b>0.840</b>			
(4) CS	4.23	2.00	0.579**	0.730***	-0.058	<b>0.939</b>		
(5) PE	4.40	1.59	-0.225 <sup>†</sup>	0.007	-0.142	-0.062	<b>0.763</b>	
(6) SAT	5.60	1.12	0.340**	0.219 <sup>†</sup>	0.280 <sup>*</sup>	0.171	-0.377**	<b>0.813</b>
Notes: Diagonal values represent square roots of average variance extracted (AVE), inter-construct correlations shown below the diagonal; <sup>†</sup> p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001.								
<b>Table 2. Means, Standard Deviations and Construct Correlations</b>								

## Results

### Analytical Procedures

Research often operationalizes (mis)fit by combining relevant measures into an index (e.g., by calculating the difference between measures or by creating a profile similarity index). Some scholars have criticized that such indices present numerous methodological problems, such as unrealistic assumptions, ambiguity in their interpretation and the implication of additional constraints that have to be tested (Edwards, 1994). For this study, we use polynomial regression and response surface modeling instead, because it avoids these methodological shortcomings and allows to explore more complex effects than a linear model could do (Klein et al. 2009). Polynomial regression uses measures of the independent variables and their squares and products to predict the dependent variable. The equation we use for determining the effects is:

$$Z = b_0 + b_1X + b_2Y + b_3X^2 + b_4XY + b_5Y^2 + b_iC_i + \epsilon_0,$$

where  $X$  represents the worker's actual needs for job security (or compensation);  $Y$  represents the perceived supplies regarding job security (or compensation) by the OLP;  $C_i$  are control variables; and  $Z$  is the worker's attitude towards the OLP in terms of perceived exploitation (or system satisfaction). Before conducting the analysis, we mean-centered the predictors in order to improve interpretability of the results and reduce the potential for multicollinearity (Aiken et al., 1991). Further, we reduced the multi-item dimensions to a single item by averaging the items for each dimension. After conducting the polynomial regression analysis, the regression coefficients can be used to plot a response surface pattern, which is a three-dimensional visual representation of the data. To check if the hypotheses of the research model are supported by the data, we calculated the slopes and curvatures of the line of fit (i.e., the line of the graph where  $Y = X$ ) and misfit (i.e., the line of the graph where  $Y = -X$ ) and tested them for significance (Shanock et al., 2010).

### Polynomial Regression Analysis

Table 3 shows the results of polynomial regression analysis for the two dependent variables: job security and compensation. Regarding job security, the variance explained ( $R^2$ ) in perceived exploitation and system satisfaction was significant. The higher-order (i.e., quadratic and interaction) terms in the polynomial regression equations accounted for significant incremental variance in the dependent variables. Moreover, we could identify quadratic and interaction terms in the polynomial regression equations for job security that significantly affected perceived exploitation and system satisfaction. Regarding compensation, the variance explained ( $R^2$ ) was also significant for all dependent variables. The quadratic terms were partially significant in perceived exploitation and accounted for significant incremental variance. For system satisfaction, however, this was not the case. Also, only workers' needs for compensation had a significant effect on system satisfaction, while the influence of perceived supplies was insignificant. Given these results, it is not reasonable to consider the joint effects of compensation needs and supplies on system satisfaction. As such, we did not perform a response surface analysis for this equation.

Except for degree of dependency on perceived exploitation, none of the control variables had a significant effect on the dependent variables. We thus excluded the non-significant variables from further analysis.

<b>Job security</b>	X	Y	X <sup>2</sup>	XY	Y <sup>2</sup>	DD	R <sup>2</sup>	ΔR <sup>2</sup>
PE	-0.60***	0.01	-0.06	-0.09 <sup>†</sup>	0.14***	0.35***	0.27***	0.10**
SAT	0.58***	0.14**	0.17***	0.03	-0.01	-0.01	0.25***	0.12***
<b>Compensation</b>	X	Y	X <sup>2</sup>	XY	Y <sup>2</sup>	DD	R <sup>2</sup>	ΔR <sup>2</sup>
PE	-0.61**	-0.05	-0.18	-0.02	0.12**	0.23**	0.19***	0.08*
SAT	0.44**	0.05	0.05	0.10	-0.01	0.06	0.12*	0.04

Notes: X: Job security/compensation needs, Y: Job security/compensation supplies, DD: Degree of dependency, PE: Perceived exploitation, SAT: System satisfaction; <sup>†</sup> p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

**Table 3. Results from Polynomial Regressions on Job Security and Compensation**

**Response Surface Analysis**

To interpret the effects of job security and compensation (mis)fits on perceived exploitation and system satisfaction, we graphically plot the relationships found in the polynomial regression analysis and analyze their relevant features (Edwards, 2001): the curvature and slope of the line of fit and the line of misfit. The analysis results are presented in Table 4. Figures 2, 3 and 4 show the graphical plots of the response surfaces and their lines of fit (solid line in (a) and cross section in (b)) and misfit (dashed line in (a) and cross section in (c)). Below, we present the analysis results and explain what they mean in terms of our hypotheses.

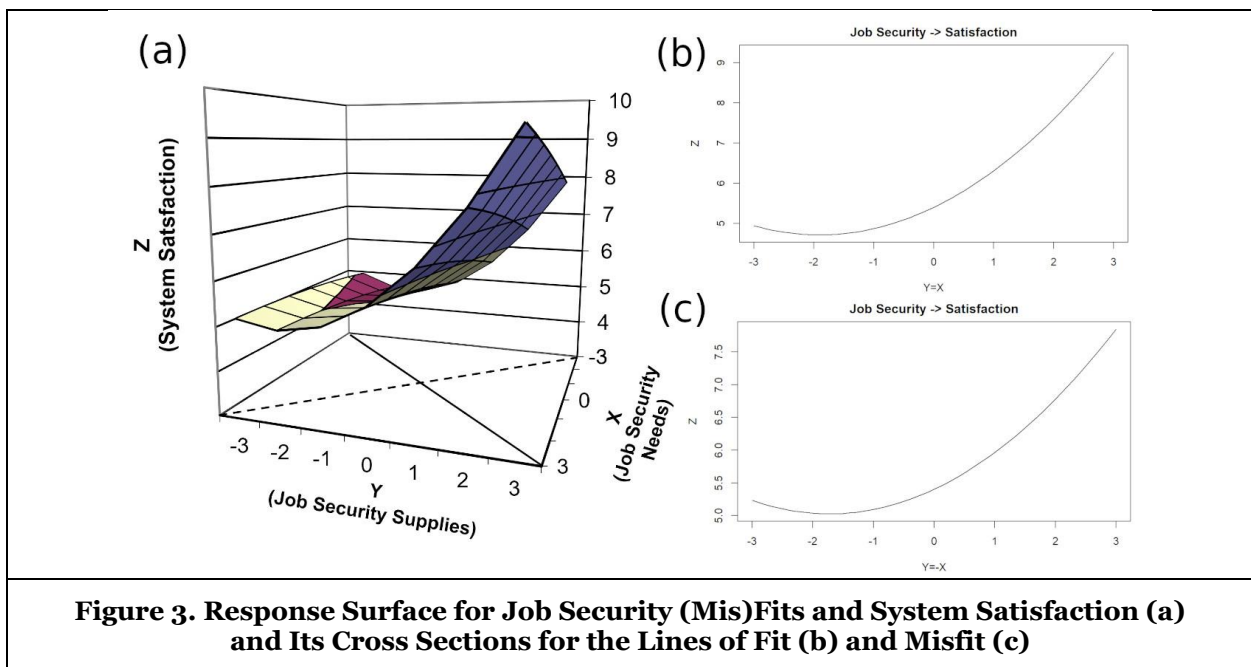
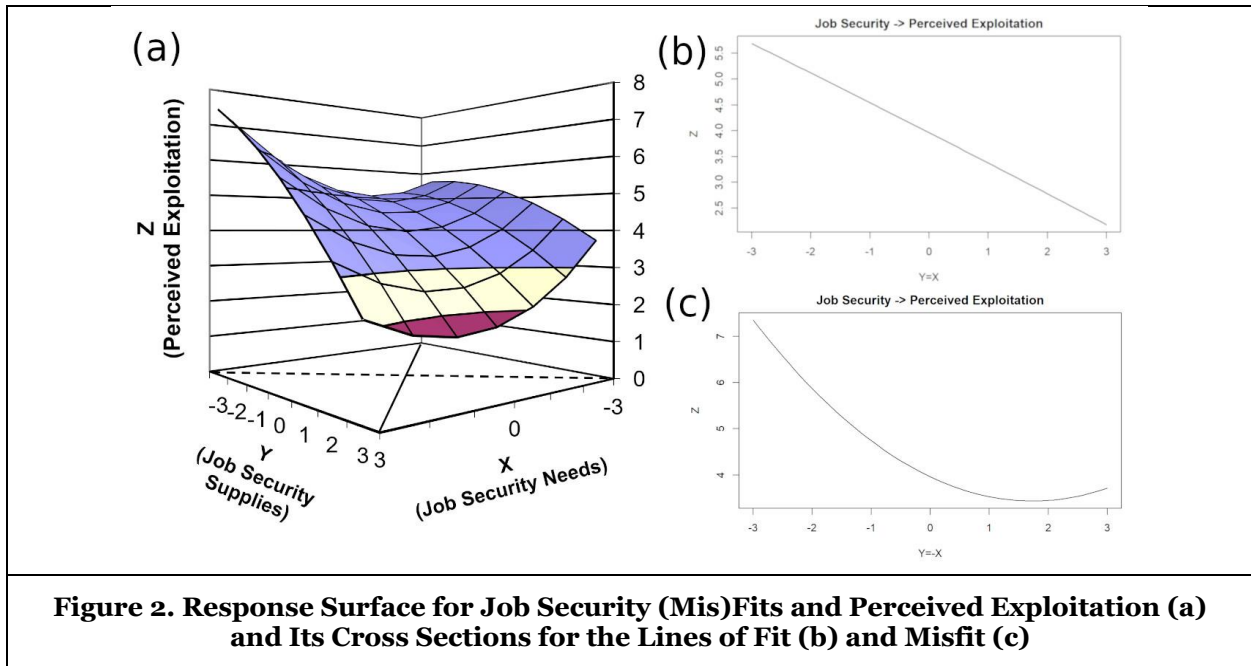
<b>Independent variable</b>	<b>Dependent variable</b>	<b>Line of fit</b>		<b>Line of misfit</b>	
		<b>Slope</b>	<b>Curvature</b>	<b>Slope</b>	<b>Curvature</b>
Job Security	PE	-0.585***	-0.003	-0.605**	0.175*
	SAT	0.718***	0.189***	0.436***	0.127*
Compensation	PE	-0.655**	-0.084	-0.562*	-0.037
	SAT <sup>1</sup>	-	-	-	-

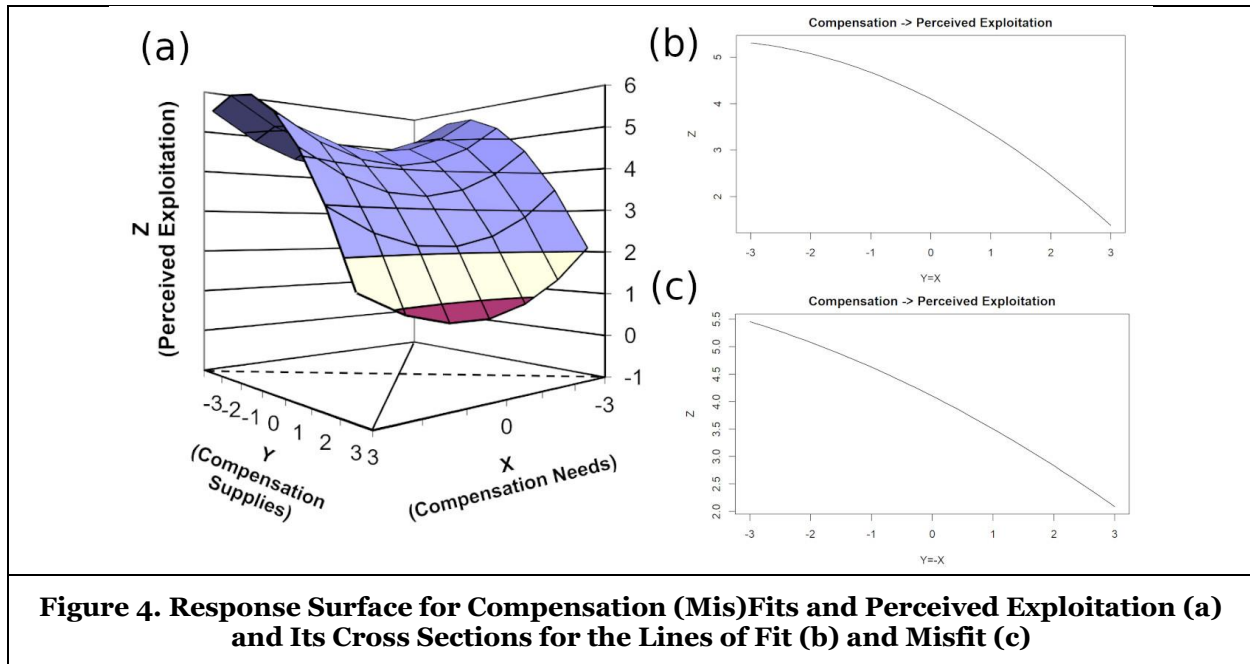
Notes: <sup>1</sup> Variable did not qualify for response surface analysis; IV: Independent variable, DV: Dependent variable, PE: Perceived exploitation, SAT: System satisfaction; <sup>†</sup> p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

**Table 4. Results from Response Surface Analysis**

Regarding the response surface of perceived exploitation on job security, the line of fit had a negative significant slope (-0.585, p < 0.001). As depicted in the response surface plot in Figure 2a and the cross section in Figure 2b, perceived exploitation on the line of misfit was highest if job security needs and supplies were in fit on the lowest level (X = -3, Y = -3) and decreased with higher levels of needs and supplies. This means that perceived exploitation was lower in case of job security fit at a low level than at high level. Thus, H1a is supported. The curvature of the line of fit is insignificant (-0.003, p > 0.1), meaning that perceived exploitation decreases linearly with increasing levels of fit. The line of misfit had a significant negative slope (-0.605, p < 0.01) with a positive and significant curvature (0.175, p < 0.05). As Figures 2a and 2c show, perceived exploitation was highest at the point X = 3, Y = -3 (i.e., when there was a highly negative misfit), decreased with diminishing negative misfits (see left-hand side of Figure 2c) and further decreased with increasing positive misfits (see right-hand side of Figure 2c). The less negative or the more positive the misfit was, the less sharply decreased perceived exploitation, which support H3a and H5a. Regarding the response surface of system satisfaction on job security, the slope of the line of fit was positive and significant (0.718, p < 0.001), meaning that system satisfaction was higher if job security needs and supplies fit at a higher level (see Figures 3a and 3b). Therefore, the results support H1b. Also, the curvature had a significant positive value (0.189, p < 0.001), meaning that system satisfaction increased more sharply the higher the job security values were. The slope of the line of misfit was significant and positive (0.436, p < 0.001). So, system satisfaction increased with a more positive job security misfit and decreased with a more negative misfit. The curvature was significantly positive (0.127, p < 0.05), meaning that system satisfaction increased more sharply in case of a more positive or less negative job security misfit (see Figures 3a and 3c). Thus, H3b and H5b are supported.

The line of compensation fit for perceived exploitation had a negative significant slope ( $-0.655, p < 0.01$ ). As shown in Figures 4a and 4b, perceived exploitation was highest at the lowest level of fit and decreased with increasing levels of fit, supporting H2a. The curvature of the line of fit is insignificant ( $-0.084, p > 0.1$ ). So, perceived exploitation decreases linearly in case of fit. For misfit, the slope was negative and significant ( $-0.562, p < 0.05$ ) with a non-significant curvature ( $-0.037, p > 0.1$ ). As depicted in Figures 4a and 4c, perceived exploitation was highest in case of a high negative misfit ( $X = -3, Y = 3$ ) and decreased until the point of highest positive misfit was reached ( $X = 3, Y = -3$ ), which provides support for H4a. However, the shape of the line of misfit was not concave. Instead, perceived exploitation decreased linearly with lower negative or higher positive misfit. Therefore, H6a is not supported. As the analysis showed that only compensation had a significant effect on system satisfaction, H2b, H4b, and H6b are not supported either.





## Discussion

In this paper, we aimed to answer the question how job security (mis)fit and compensation (mis)fit between workers’ actual needs and perceived OLP supplies influence workers’ perceived exploitation and system satisfaction. Overall, we find support for eight of our 12 hypotheses (see Table 5 for a summary).

Hypothesis	Supported?
<b>H1:</b> (a) Workers’ perceived exploitation will be lower and (b) workers’ system satisfaction will be higher if job security needs and supplies fit at a high level than when they fit at a low level.	(a) Yes (b) Yes
<b>H2:</b> (a) Workers’ perceived exploitation will be lower and (b) workers’ system satisfaction will be higher if compensation needs and supplies fit at a high level than when they fit at a low level.	(a) Yes (b) No
<b>H3:</b> In case of job security misfit, the less negative or the more positive the misfit is, (a) the lower is the worker’s perceived exploitation and (b) the higher is the worker’s system satisfaction.	(a) Yes (b) Yes
<b>H4:</b> In case of compensation misfit, the less negative or the more positive the misfit is, (a) the lower is the worker’s perceived exploitation and (b) the higher is the worker’s system satisfaction.	(a) Yes (b) No
<b>H5:</b> The marginal effects of job security misfit (a) on perceived exploitation are diminishing and (b) on system satisfaction are increasing.	(a) Yes (b) Yes
<b>H6:</b> The marginal effects of compensation misfit (a) on perceived exploitation are diminishing and (b) on system satisfaction are increasing.	(a) No (b) No

**Table 5. Summary of Hypothesis Test Results**

The findings of our study can be summarized as follows: with higher job security fit, we find that perceived exploitation decreases and system satisfaction increases, whereas higher compensation fit leads to a decrease in perceived exploitation. Also, we find that a more negative or a less positive job security misfit results in higher perceived exploitation and lower system satisfaction. Regarding compensation, a misfit leads to increased perceived exploitation. Further, our results suggest that job security misfit has decreasing

(increasing) marginal effects on perceived exploitation (system satisfaction). Moreover, with respect to the four unsupported hypotheses, it is noticeable that many are related to workers' system satisfaction and the role of compensation. This suggests that a (mis)fit for compensation does not necessarily affect satisfaction in the same way that it affects exploitation. This is consistent with theories emphasizing that compensation is primarily related to avoiding dissatisfaction (e.g., perceived exploitation), but does not necessarily affect satisfaction (Herzberg et al., 1959).

### ***Contributions to Research***

This study mainly makes two important contributions to research on OLPs. First, research about OLPs that investigates the effect of the OLP design on workers' attitudes often implicitly assumes that all workers have the same preferences and needs that have to be fulfilled by the OLP (Cram et al., 2022; Möhlmann et al., 2021; Wiener et al., 2021). However, gig workers choose to work on an OLP for a variety of reasons and therefore have different needs regarding aspects as job security and compensation (e.g., Davidson et al., 2023; Deng and Joshi, 2016; Ross et al., 2010). In our research, we challenge this implicit assumption by examining the workers' individual (mis)fits regarding how much job security and compensation they need and how much they perceive the OLP supplies. We show that worker attitudes towards an OLP are contingent on the level of (mis)fit. If workers perceive that the OLP considers these two resources as important as they do or even supplies more than they need, they feel less exploited and more satisfied. These insights are important as they demonstrate that oversupply of job security and compensation do not create negative effects, as often assumed in traditional organizational contexts (e.g., Cable and Edwards, 2004). In contrast: The effects of each additional unit of job security and compensation beyond the fit will have a positive effect, while the positive effects for job security even increase at an increasing rate.

Second, this paper particularly provides insights by examining workers' perceived exploitation and thus responds to the call for focusing more on the ethical implications of information systems (e.g., Sarker et al., 2019; Spiekermann et al., 2022). Some criticize that the IS discipline misses an ethical standing in society because scholars do not sufficiently reflect on consequences of IT and therefore ignore businesses' use of IT in a dehumanizing way (e.g., Sarker et al., 2019). Especially in the context of the design of OLPs, gig workers often feel exploited and perceive that their concerns are unheard (e.g., Cameron and Rahman, 2022; Deng et al., 2016; Kellogg et al., 2020). By integrating the dimension of perceived exploitation in our model, we extend current research by showing that insufficient consideration of individual needs is a key aspect for perceiving exploitation.

### ***Implications for Practice***

Beyond our theoretical contributions, our insights are particularly relevant for providers of OLPs. We show that not sufficiently valuing workers' needs for job security and compensation damages workers' experience with the OLP due to lower system satisfaction and higher perceptions of exploitation. Therefore, OLP owners are well advised to invest in better understanding the specific job needs of their workers, as opposed to operating on the assumption that all workers share similar needs (such as a high need for job security and compensation). In doing so, they will be better equipped in aligning the design of their platform with actual worker needs. For example, OLP owners could conduct periodic surveys among their workers in which they could ask them how important compensation and job security (and possibly other potentially relevant aspects) are to them and to what degree they are supplied by the OLP. By that, OLP owners are able to detect and counteract mismatches early. Owners of OLPs might extend these surveys by interviewing a sample of the workers to find the sources of their perceptions (e.g., the management mechanisms that make workers perceive that the OLP does not care about job security).

As workers have different needs for job security and compensation, the results indicate that OLP providers should try to differentiate the supplied job security and compensation across workers by adapting their matching and control mechanisms. For example, the ride-hailing platform Lyft offers scheduled pickups. This feature allows workers to accept planned rides in advance (Lyft, 2022). Workers with high needs for job security can use this feature to reduce their uncertainty, while workers who value flexibility more than job security can ignore it and keep relying on the regular job assignment mechanisms. With features like this, OLP providers could establish perceptions of fit, adjusting their supplies to the workers' individual needs. Generally, algorithmic management that tailors matching and control mechanisms to individual needs is likely to play a key role in improving gig workers' attitudes towards an OLP.

## Limitations and Future Research

As with any research, our study has limitations and that provide opportunities for further research. First, our study is cross-sectional. Thus, we can only test associations, but not if the effects are causal as we theorized. Longitudinal studies of the fit between workers and OLPs could provide evidence whether the causality is correct. Also, the degree of perceived fit between workers and OLPs could change over time, future research could explore this as well. Second, our data is based on a single OLP. Therefore, caution should be taken when drawing general conclusions from this study. We examined MTurk, which is a large and well-established OLP that focuses on mediating virtual low-skilled work and that employs a rather low degree of worker management. On other OLPs (e.g., Uber) with higher degrees of management, with other types of work provided or with higher degree of qualifications needed, and with expectations for the workers (e.g., full-time vs. part-time working), the effects could be different. Also, we limited our sample to workers from the U.S. to mitigate potentially confounding effects of national and cultural differences. Further research should check if our effects are transferable to other OLPs and other cultural contexts. In this vein, it would be interesting to see how the supplies of other OLPs affect workers' needs and other dependent variables, such as workers' continuance intentions, workarounds, and OLP switching. Third, we focused on the relationship between workers and the OLP. We did not examine the influence of the work requesters, although the requesters could reasonably also affect workers' perceptions. For example, if workers have the impression that the OLP prioritizes the requesters' needs and therefore neglects the workers' own needs, this could change the strength of the effects of (mis)fit on their perceived exploitation and system satisfaction. Therefore, it would be a promising opportunity for future research to include the role of the work requesters in the relationship.

## Conclusion

OLPs use algorithms to manage their gig workers. To sufficiently understand how OLP's management mechanisms influence gig workers' attitudes, we need to challenge the often-implicated assumption in research that all gig workers need the same job security and compensation. Instead, we require to consider the individual worker's (mis)fits between actual needs and perceived supplies. Our research leverages PO fit theory and polynomial regression analysis to shed light on how job security and compensation (mis)fit impact perceived exploitation and system satisfaction. We find that a fit or even a positive misfit (vs. a negative misfit) is beneficial from the gig workers' perspective. With these findings, we contribute to OLP research by providing nuanced insights on the important interplay between what gig workers need and what they perceive to receive.

## Acknowledgements

The authors gratefully acknowledge the funding support by the German Research Foundation (DFG) as part of the project "AlgoWork" (project number 461985572) and the Center for Responsible Digitality (ZEVEDI).

## References

- Adam, M., Roethke, K., and Benlian, A. 2022. "Human Versus Automated Sales Agents: How and Why Customer Responses Shift Across Sales Stages," *Information Systems Research* (0:0).
- Adkins, C. L., Russell, C. J., and Werbel, J. D. 1994. "Judgments of fit in the selection process: The role of work value congruence," *Personnel Psychology* (47:3), pp. 605-623.
- Aiken, L. S., West, S. G., and Reno, R. R. 1991. *Multiple regression: Testing and interpreting interactions*, Newbury Park, CA: Sage.
- Anderson, M., McClain, C., Faverio, M., and Gelles-Watnick, R. 2021. "The State of Gig Work in 2021," Pew Research Center.
- Ashford, S. J., Caza, B. B., and Reid, E. M. 2018. "From surviving to thriving in the gig economy: A research agenda for individuals in the new world of work," *Research in Organizational Behavior* (38), pp. 23-41.
- Ashford, S. J., Lee, C., and Bobko, P. 1989. "Content, cause, and consequences of job insecurity: A theory-based measure and substantive test," *Academy of Management Journal* (32:4), pp. 803-829.

- Barley, S. R., Bechky, B. A., and Milliken, F. J. 2017. "The Changing Nature of Work: Careers, Identities, and Work Lives in the 21<sup>st</sup> Century," *Academy of Management Discoveries* (3:2), pp. 111-115 (doi: 10.5465/amd.2017.0034).
- Benlian, A. 2013. "Effect mechanisms of perceptual congruence between information systems professionals and users on satisfaction with service," *Journal of Management Information Systems* (29:4), pp. 63-96 (doi: 10.2753/mis0742-1222290402).
- Benlian, A. 2014. "Are we aligned... enough? The effects of perceptual congruence between service teams and their leaders on team performance," *Journal of Service Research* (17:2), pp. 212-228.
- Benlian, A., Wiener, M., Cram, W. A., Krasnova, H., Maedche, A., Möhlmann, M., Recker, J., and Remus, U. 2022. "Algorithmic management: bright and dark sides, practical implications, and research opportunities," *Business & Information Systems Engineering* (64:6), pp. 825-839 (doi: 10.1007/s12599-022-00764-w).
- Brown, S. A., Venkatesh, V., Kuruzovich, J., and Massey, A. P. 2008. "Expectation confirmation: An examination of three competing models," *Organizational Behavior and Human Decision Processes* (105:1), pp. 52-66.
- Cable, D. M., and Edwards, J. R. 2004. "Complementary and supplementary fit: a theoretical and empirical integration," *Journal of Applied Psychology* (89:5), pp. 822-834.
- Cameron, L. D., and Rahman, H. 2022. "Expanding the locus of resistance: Understanding the co-constitution of control and resistance in the gig economy," *Organization Science* (33:1), pp. 38-58 (doi: 10.1287/orsc.2021.1557).
- Chatman, J. A. 1989. "Improving interactional organizational research: A model of person-organization fit," *Academy of Management Review* (14:3), pp. 333-349.
- Conway, N., and Coyle-Shapiro, J. A.-M. 2012. "The reciprocal relationship between psychological contract fulfilment and employee performance and the moderating role of perceived organizational support and tenure," *Journal of Occupational and Organizational Psychology* (85:2), pp. 277-299.
- Covin, T. J., Kolenko, T. A., Sightler, K. W., and Tudor, R. K. 1993. "Pay and Organizational Effectiveness: Empirical Evidence and Implications for Management Consultants," *Academy of Management Proceedings* (1993:1), pp. 185-189 (doi: 10.5465/ambpp.1993.10315787).
- Cram, W. A., Wiener, M., Tarafdar, M., and Benlian, A. 2022. "Examining the Impact of Algorithmic Control on Uber Drivers' Technostress," *Journal of Management Information Systems* (39:2), pp. 426-453 (doi: 10.1080/07421222.2022.2063556).
- Cuyper, N. de, and Witte, H. de. 2006. "The impact of job insecurity and contract type on attitudes, well-being and behavioural reports: a psychological contract perspective," *Journal of Occupational and Organizational Psychology* (79:3), pp. 395-409.
- Davidson, A., Gleim, M. R., Johnson, C. M., and Stevens, J. L. 2023. "Gig worker typology and research agenda: advancing research for frontline service providers," *Journal of Service Theory and Practice* (33:5), pp. 647-670 (doi: 10.1108/JSTP-08-2022-0188).
- Delone, W. H., and McLean, E. R. 2003. "The DeLone and McLean Model of Information Systems Success: A Ten-Year Update," *Journal of Management Information Systems* (19:4), pp. 9-30 (doi: 10.1080/07421222.2003.11045748).
- Deng, X., Joshi, K. D., and Galliers, R. D. 2016. "The duality of empowerment and marginalization in microtask crowdsourcing: Giving voice to the less powerful through value sensitive design," *MIS Quarterly* (40:2), pp. 279-302.
- Deng, X. N., and Joshi, K. D. 2016. "Why individuals participate in micro-task crowdsourcing work environment: Revealing crowdworkers' perceptions," *Journal of the Association for Information Systems* (17:10), pp. 711-736.
- Dutton, J. E., and Dukerich, J. M. 1991. "Keeping an eye on the mirror: Image and identity in organizational adaptation," *Academy of Management Journal* (34:3), pp. 517-554.
- Edwards, J. 1991. "Person-job fit: A conceptual integration, literature review, and methodological critique," in *International review of industrial and organizational psychology*, C. L. Cooper, and I. T. Robertson (eds.), pp. 283-357.
- Edwards, J. R. 1994. "The study of congruence in organizational behavior research: Critique and a proposed alternative," *Organizational Behavior and Human Decision Processes* (58:1), pp. 51-100.
- Edwards, J. R. 2001. "Alternatives to difference scores: Polynomial regression analysis and response surface methodology," in *Measuring and analyzing behavior in organizations: Advances in measurement and data analysis*, F. Drasgow and N. Schmitt (eds.), San Francisco, CA, US: Jossey-Bass, pp. 350-400.

- Edwards, J. R., and Cable, D. M. 2009. "The value of value congruence," *Journal of Applied Psychology* (94:3), pp. 654-677.
- Endler, N. S., and Magnusson, D. E. 1976. *Interactional psychology and personality*, New York: Wiley.
- Fornell, C., and Larcker, D. F. 1981. "Evaluating structural equation models with unobservable variables and measurement error," *Journal of Marketing Research* (18:1), pp. 39-50.
- Friedman, G. 2014. "Workers without employers: shadow corporations and the rise of the gig economy," *Review of Keynesian Economics* (2:2), pp. 171-188.
- Gawer, A. 2014. "Bridging differing perspectives on technological platforms: Toward an integrative framework," *Research Policy* (43:7), pp. 1239-1249.
- Goodman, J. K., and Paolacci, G. 2017. "Crowdsourcing consumer research," *Journal of Consumer Research* (44:1), pp. 196-210.
- Goods, C., Veen, A., and Barratt, T. 2019. "'Is your gig any good?' Analysing job quality in the Australian platform-based food-delivery sector," *Journal of Industrial Relations* (61:4), pp. 502-527.
- Greenhalgh, L., and Rosenblatt, Z. 1984. "Job insecurity: Toward conceptual clarity," *Academy of Management Review* (9:3), pp. 438-448.
- Hara, K., Adams, A., Milland, K., Savage, S., Callison-Burch, C., and Bigham, J. P. 2018. "A Data-Driven Analysis of Workers' Earnings on Amazon Mechanical Turk," in *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*, Montreal, Canada: Association for Computing Machinery, Paper 449 (doi: 10.1145/3173574.3174023).
- Henseler, J., Ringle, C. M., and Sarstedt, M. 2015. "A new criterion for assessing discriminant validity in variance-based structural equation modeling," *Journal of the Academy of Marketing Science* (43:1), pp. 115-135.
- Herzberg, F., Mausner, B., and Snyderman, B. 1959. *The Motivation to Work*, New York: John Wiley.
- Howell, R. T., Kurai, M., and Tam, L. 2013. "Money buys financial security and psychological need satisfaction: Testing need theory in affluence," *Social Indicators Research* (110:1), pp. 17-29.
- Irani, L. 2015. "Difference and dependence among digital workers: The case of Amazon Mechanical Turk," *South Atlantic Quarterly* (114:1), pp. 225-234.
- Jiang, J., Adam, M., and Benlian, A. 2021. "Algoactivistic practices in ridesharing—a topic modeling & grounded theory approach," *ECIS 2021 Research Papers*.
- Johnson, M. K. 2002. "Social origins, adolescent experiences, and work value trajectories during the transition to adulthood," *Social Forces* (80:4), pp. 1307-1340.
- Kellogg, K. C., Valentine, M. A., and Christin, A. 2020. "Algorithms at work: The new contested terrain of control," *Academy of Management Annals* (14:1), pp. 366-410.
- Klein, G., Jiang, J. J., and Cheney, P. 2009. "Resolving difference score issues in information systems research," *MIS Quarterly* (33:4), pp. 811-826.
- Kristof-Brown, A. L., and Stevens, C. K. 2001. "Goal congruence in project teams: Does the fit between members' personal mastery and performance goals matter?" *Journal of Applied Psychology* (86:6), pp. 1083-1095.
- Kristof-Brown, A. L., Zimmerman, R. D., and Johnson, E. C. 2005. "Consequences of individuals' fit at work: A meta-analysis of person–job, person–organization, person–group, and person–supervisor fit," *Personnel Psychology* (58:2), pp. 281-342.
- Kuek, S. C., Paradi-Guilford, C., Fayomi, T., Imaizumi, S., Ipeirotis, P., Pina, P., and Singh, M. 2015. "The global opportunity in online outsourcing," Washington, D.C.: World Bank Group.
- Kung, F. Y. H., Kwok, N., and Brown, D. J. 2018. "Are attention check questions a threat to scale validity?" *Applied Psychology* (67:2), pp. 264-283.
- Livne-Ofer, E., Coyle-Shapiro, J. am, and Pearce, J. L. 2019. "Eyes wide open: Perceived exploitation and its consequences," *Academy of Management Journal* (62:6), pp. 1989-2018.
- Lu, C., Du, D., Xu, X., and Zhang, R. 2017. "Revisiting the relationship between job demands and job performance: The effects of job security and traditionality," *Journal of Occupational and Organizational Psychology* (90:1), pp. 28-50.
- Lyft. 2022. "Scheduled pickups for drivers," available at <https://help.lyft.com/hc/e/articles/115012924387-Scheduled-pickups-for-drivers>, accessed on Feb 25 2022.
- Maruping, L. M., Daniel, S. L., and Cataldo, M. 2019. "Developer centrality and the impact of value congruence and incongruence on commitment and code contribution activity in open source software communities," *MIS Quarterly* (43:3), pp. 951-976.



- Mastercard and Kaiser Associates. 2019. "The Global Gig Economy: Capitalizing on a ~\$500B Opportunity," available at <https://newsroom.mastercard.com/wp-content/uploads/2019/05/Gig-Economy-White-Paper-May-2019.pdf>, accessed on Mar 27 2022.
- Möhlmann, M., and Zalmanson, L. 2017. "Hands on the wheel: Navigating algorithmic management and Uber drivers' autonomy," in *Proceedings of the Thirty-Eighth International Conference on Information Systems*, Seoul, South Korea.
- Möhlmann, M., Zalmanson, L., Henfridsson, O., and Gregory, R. W. 2021. "Algorithmic management of work on online labor platforms: When matching meets control," *MIS Quarterly* (45:4).
- Möhlmann, M., Alves de Lima Salge, Carolina, and Marabelli, M. 2023. "Algorithm sensemaking: How platform workers make sense of algorithmic management," *Journal of the Association for Information Systems* (24:1), pp. 35-64.
- O'Reilly, C., Chatman, J., and Caldwell, D. F. 1991. "People and organizational culture: A profile comparison approach to assessing person-organization fit," *Academy of Management Journal* (34:3), pp. 487-516.
- Petriglieri, G., Ashford, S. J., and Wrzesniewski, A. 2019. "Agony and ecstasy in the gig economy: Cultivating holding environments for precarious and personalized work identities," *Administrative Science Quarterly* (64:1), pp. 124-170.
- Porter, L. W. 1961. "A study of perceived need satisfactions in bottom and middle management jobs," *Journal of Applied Psychology* (45:1), pp. 1-10.
- Rosenblat, A., and Stark, L. 2016. "Algorithmic labor and information asymmetries: A case study of Uber's drivers," *International Journal of Communication* (10), pp. 3758-3784.
- Ross, J., Irani, L., Silberman, M. S., Zaldivar, A., and Tomlinson, B. 2010. "Who are the crowdworkers? Shifting demographics in Mechanical Turk," in *Proceedings of the 2010 CHI Conference on Human Factors in Computing Systems*, Atlanta, USA, pp. 2863-2872.
- Rychalski, A., and Hudson, S. 2017. "Asymmetric effects of customer emotions on satisfaction and loyalty in a utilitarian service context," *Journal of Business Research* (71), pp. 84-91 (doi: 10.1016/j.jbusres.2016.10.014).
- Sarker, S., Chatterjee, S., Xiao, X., and Elbanna, A. 2019. "The sociotechnical axis of cohesion for the IS discipline: Its historical legacy and its continued relevance," *MIS Quarterly* (43:3), pp. 695-720.
- Schneider, B. 2001. "Fits About Fit," *Applied Psychology* (50:1), pp. 141-152 (doi: 10.1111/1464-0597.00051).
- Shanock, L. R., Baran, B. E., Gentry, W. A., Pattison, S. C., and Heggestad, E. D. 2010. "Polynomial regression with response surface analysis: A powerful approach for examining moderation and overcoming limitations of difference scores," *Journal of Business and Psychology* (25:4), pp. 543-554.
- Spiekermann, S., Krasnova, H., Hinz, O., Baumann, A., Benlian, A., Gimpel, H., Heimbach, I., Köster, A., Maedche, A., Niehaves, B., Risius, M., and Trenz, M. 2022. "Values and Ethics in Information Systems," *Business & Information Systems Engineering* (64:2), pp. 247-264 (doi: 10.1007/s12599-021-00734-8).
- Spokane, A. R. 1985. "A review of research on person-environment congruence in Holland's theory of careers," *Journal of Vocational Behavior* (26:3), pp. 306-343.
- Todolí-Signes, A. 2017. "The 'gig economy': employee, self-employed or the need for a special employment regulation?" *Transfer: European Review of Labour and Research* (23:2), pp. 193-205.
- Tremblay, M., and Roussel, P. 2001. "Modelling the role of organizational justice: effects on satisfaction and unionization propensity of Canadian," *International Journal of Human Resource Management* (12:5), pp. 717-737.
- Wiener, M., Cram, W., and Benlian, A. 2021. "Algorithmic control and gig workers: a legitimacy perspective of Uber drivers," *European Journal of Information Systems* (32:3), pp. 485-507 (doi: 10.1080/0960085X.2021.1977729).
- Wiener, M., Mähring, M., Remus, U., and Saunders, C. 2016. "Control configuration and control enactment in information systems projects: review and expanded theoretical framework," *MIS Quarterly* (40:3), pp. 741-774 (doi: 10.25300/MISQ/2016/40.3.11).
- Wixom, B. H., and Todd, P. A. 2005. "A theoretical integration of user satisfaction and technology acceptance," *Information Systems Research* (16:1), pp. 85-102.

## Appendix: Construct Operationalization

Construct	Items
<b>Job security needs/supplies</b> <sup>1</sup> (Cable and Edwards, 2004)	How important is this to you? / How important is this to MTurk? <b>JS1:</b> Being certain of keeping my job on MTurk. <b>JS2:</b> Being sure I will always have a job on MTurk. <b>JS3:</b> Being certain my job on MTurk will last. <b>JS4:</b> Being sure that I continuously get new HITs.
<b>Compensation needs/supplies</b> <sup>1</sup> (Cable and Edwards, 2004)	<i>How important is this to you? / How important is this to MTurk?</i> <b>C1:</b> Salary level on MTurk. <b>C2:</b> Total compensation for my work. <b>C3:</b> The amount of pay for my work.
<b>Perceived exploitation</b> <sup>2</sup> (Livne-Ofer et al., 2019)	<b>PE1:</b> On MTurk, I have been taken advantage of for several times. <b>PE2:</b> MTurk forced me into accepting policies and guidelines that unilaterally benefit the platform. <b>PE3:</b> On MTurk, inadequate compensation is paid because it is known that I need this job. <b>PE4:</b> On MTurk, I get intentionally undercompensated because it is known that I am desperate for this job. <b>PE5:</b> MTurk doesn't provide me with job security as it wants to be able to get rid of me at its convenience. <sup>D</sup> <b>PE6:</b> On MTurk, nobody cares if I get harmed, as long as someone else benefits from my work.
<b>System satisfaction</b> (Brown et al., 2008)	<b>SAT1:</b> I am an enthusiastic MTurk worker. <sup>2, D</sup> <b>SAT2:</b> All things considered, my continuing to use MTurk is... (extremely negative to extremely positive) <b>SAT3:</b> All things considered, my continuing to use MTurk is... (extremely bad to extremely good) <sup>D</sup> <b>SAT4:</b> All things considered, my continuing to use MTurk is... (extremely harmful to extremely beneficial)
<i>Notes:</i> <sup>1</sup> Measured on 7-point Likert scale with "(1) not at all" and "(7) to an extreme degree" anchors; <sup>2</sup> 7-point Likert scale with "(1) strongly disagree" and "(7) strong agree" anchors; <sup>D</sup> Deleted based on validation process.	
<b>Table A1. Measurement Items</b>	