IERER 16.1

Received 1 September 2022 Revised 1 December 2022 Accepted 8 March 2023

Fat cats or sociable wolves? Swedish real estate brokers and intrinsic rewards - A quantitative empirical generalization

Martin Ahlenius and Jonas Kågström

Department of Business and Economic Studies, Faculty of Education and Business Studies, University of Gävle, Gavle, Sweden

Abstract

Purpose – Intrinsic motivation affects job satisfaction and turnover intention. Still, previous motivational studies among real estate brokers (brokers) have primarily focused on extrinsic rewards, leaving intrinsic rewards/motivation practically unexplored. The purpose of this study is therefore to evaluate the role of both satisfaction with intrinsic rewards (SIR) and satisfaction with extrinsic rewards (SER) on job satisfaction and turnover intention among Swedish brokers.

Design/methodology/approach – This article is a replication, more precisely an empirical generalization and extension, of Mosquera et al.'s (2020) study conducted among brokers in Portugal. Using a sample of 910 Swedish brokers, the study analyzes a conceptual framework and tests hypotheses by using partial least squares (PLS).

Findings – Results indicate that SIR has a very strong impact on job satisfaction, which is not the case in the Portuguese sample. On the other hand, SER does not have an impact on job satisfaction, which is the case in the Portuguese sample, SIR does not have an impact on turnover intention in the Swedish sample, whereas SER does. Job satisfaction has twice the positive impact on turnover intention in the Swedish sample compared to the Portuguese. Furthermore, job satisfaction mediates the relationship between SIR/SER and turnover

Research limitations/implications – Findings of this study extend the existing literature of satisfaction with extrinsic and in particular intrinsic rewards on job satisfaction and turnover intention in the context of the brokerage industry. The most interesting difference between the samples is that Swedish brokers display much higher levels of satisfaction with intrinsic rewards. On the other hand, Swedish brokers appear to be less driven by extrinsic rewards, which is not in line with prior studies within brokerage.

Practical implications - Both managers and students planning to become brokers should consider that SIR has a stronger impact on job satisfaction than SER. What are perceived as intrinsic rewards, however, is highly subjective, which is troublesome from a managerial perspective, even more so as SIR is much harder to influence than SER. Given that intrinsic motivation is primarily a consequence of needs fulfillment, screening of applicants for person-job fit ought to increase job satisfaction and reduce turnover given its focus on the congruence between job demands and worker's needs, respectively, what a job provides and the worker's needs.

Originality/value - This study contributes to the brokerage research field by indicating that being a broker differs substantially between countries and that intrinsic rewards matter for Swedish brokers.

Keywords Real estate brokers, Motivation, Job satisfaction, Turnover intentions

Paper type Research paper



Research Vol. 16 No. 1, 2023 pp. 92-110 Emerald Publishing Limited DOI 10.1108/JERER-09-2022-0024 © Martin Ahlenius and Jonas Kågström. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at http://creativecommons.org/licences/by/4.0/legalcode

The authors would like to thank the bachelor's students Anna Sjögren and Emma Ohman, whose omnibus survey the research questions used in this paper were included. Without their dedication to data collection, the survey would not have been as inclusive.

intrinsic

rewards

brokers and

1. Introduction

Employee turnover is one of the main problems facing the brokerage industry (Larsen and Coleman, 2003; Lee *et al.*, 2014). Many new brokers leave the occupation and/or the organization, sometimes with clear signs of burnout (Snyder *et al.*, 2011). A recent cohort study conducted among Swedish brokers reveals that circa 8.4% leave the occupation every year and that 22% leave the occupation within three years of registration (Ahlenius *et al.*, 2022). Employee turnover has several negative outcomes for broker organizations such as loss of sales, competence and customers (Boles *et al.*, 2012; Palmatier *et al.*, 2006; Weitz and Bradford, 1999).

Employee turnover is defined as an employee's voluntary or involuntary decision to leave the organization (Cotton and Tuttle, 1986) and is often addressed in previous studies within brokerage by emphasizing antecedents of brokers' turnover intentions such as job satisfaction, work-family conflicts, organizational commitment, personality traits, gender, licensee, franchise affiliation, accurate occupational expectations, intense/stressful customer interactions, hours worked and a sense of coherence (Bryson, 2017; Crant, 1995; Larsen and Coleman, 2003; Love *et al.*, 2011; Mosquera *et al.*, 2020; Snyder *et al.*, 2011).

Another way of approaching antecedents to employee turnover and job satisfaction is by emphasizing motivation seen through work-related rewards (Mosquera et al., 2020). A reward could be seen as a goal/outcome, regardless of whether the reward is extrinsic or intrinsic in nature. It is notable that a reward is only perceived as beneficial if the individual is aware that the reward satisfies a need (Deci, 1976; Heywood et al., 2017), indicating that awareness precedes motivation, or at least aligns with it. Hence, rewards only accomplish what they are intended to do from a managerial/organizational perspective if they satisfy the individual's needs. Some basic human needs and their satisfaction, like hunger, are easier to grasp for both the hungry person and a potential researcher. In contrast, work-related basic psychological needs such as competence, autonomy and relatedness might be harder to untangle as they often are intertwined (Deci and Ryan, 2014).

Satisfaction with rewards is not the same as motivation. Motivation is a force (Ryan and Deci, 2000) driven by the *awareness* that (1) certain efforts lead to rewards/goals (Heywood *et al.*, 2017); and (2) these rewards/goals satisfy individual needs (Deci, 1976; Mitchell, 1982). This line of reasoning strongly resembles the fundamental motivational concept of "locus of control" defined as a generalized attitude, belief or expectancy regarding the nature of the causal relationship between one's own behavior and its consequences (Rotter, 1966). However, we could argue that measuring the satisfaction with intrinsic and extrinsic rewards among experienced (higher rewards-needs awareness) brokers as Mosquera *et al.* (2020) have done is almost the same thing as measuring intrinsic and extrinsic motivation directly.

This study does not focus on managing rewards to the same extent as Mosquera *et al.* (2020) do even if this study is a replication, more precisely an empirical generalization and extension (Tsang and Kwan, 1999; Walker *et al.*, 2019). The reason for this is that previous studies and the Swedish brokerage context clearly indicate that brokerage is an occupation where the fluctuation of extrinsic rewards is primarily a result of individual and occupational characteristics, and not management of extrinsic rewards (Crellin *et al.*, 1988; Lee *et al.*, 2014; Rosenberg *et al.*, 1981; Mäklarsamfundet, 2021). Furthermore, to be able to manage intrinsic rewards within brokerage, there is a need to first thoroughly explore and define which aspects of brokerage are intrinsically motivating, and for whom. As there is a lack of such studies, the focus in this study is not given to managing intrinsic rewards either. The focus is only to explore the sheer existence of satisfaction with intrinsic rewards.

Another way of framing this is by seeing the existence of satisfaction with work-related rewards as something that a job/organization supplies, which requires it to be in congruence with the needs of the individual for it to create mutual sustainability. This line of reasoning is prevalent in person-job/organization fit reasoning (Edwards *et al.*, 1991; Kooij *et al.*, 2017).

Motivational studies within the sales domain emphasizing rewards and using job satisfaction and turnover intentions as outcome variables are common (Boles et al., 2012). This is not the case, however, in studies conducted on brokers. There are some prior studies that focus on motivation, although mostly on extrinsic rewards/motivation (e.g. Crant, 1995; Munneke and Yavas, 2001; Winkler and Hughen, 2012). Extrinsic rewards act as an obvious lure into the occupation (Cooke, 1999; Pattanawit and Charoensukmongkol, 2022; Snyder et al., 2011), with a salary model which is for the most part result-based (Mäklarsamfundet, 2021). This is one of the few occupations in Sweden that still retain this salary model, and so persons whose personalities draw them to extrinsic rewards may see this occupation as especially interesting (Mallin and Pullins, 2009; Stewart, 1996). However, after the initial few vears of introduction into the occupation, many new brokers are burned-out, while a significant portion remain who will come to see brokerage as a life-long passion. For these brokers, intrinsic rewards/motivation are arguably more important, or at least significantly important, to impact both job satisfaction and turnover intention (Deci and Ryan, 2000; Khusainova et al., 2018). However, intrinsic rewards/motivation among professional service providers, and brokers in particular, have been largely ignored in previous studies (Good et al., 2021; Mosquera et al., 2020; Pattanawit and Charoensukmongkol, 2022), with Mosquera et al.'s recent article being one of the most important additions in a European setting.

Mosquera *et al.* (2020) found that both satisfaction with extrinsic rewards (SER) and satisfaction with intrinsic rewards (SIR) have a positive impact on job satisfaction and a negative effect on turnover intention. This is in line with prior studies (Hofmans *et al.*, 2013; Snyder *et al.*, 2011). However, Mosquera *et al.* (2020) make several interesting observations. First, SER had a greater impact on both turnover intention and job satisfaction than SIR in the Portuguese sample. We concur that SER is certainly part of the allure that brokerage has, but that SIR plays a greater formative role than previously thought in the long term for brokers, as indicated in previous studies (Ahlenius *et al.*, 2021; Zumpano *et al.*, 2009). This study echoes the research proposal by Mosquera *et al.* (2020) to **replicate** their study with a broader sample and in a different country. Hence, the purpose of this study is to evaluate the role of both satisfaction with intrinsic rewards and satisfaction with extrinsic rewards on job satisfaction and turnover intention in the Swedish real estate brokerage industry.

2. Theory and hypotheses

As the Swedish system only has real estate brokers (see Ahlenius et al., 2021 for a more thorough description), the term broker is used throughout the article even though some scholars use the term real estate agent (e.g. Mosquera et al., 2020), broker (e.g. Dunlap et al., 1988), realtor (Glower and Hendershott, 1988) and worker (Bryson, 2017). The underlying reason for using broker is to avoid confusion and make a national comparison possible. It is noteworthy that there are national/legal differences concerning the existence, competence and authority vis-à-vis real estate agents/brokers, which makes direct comparison very hard (Benjamin et al., 2000; Ingram and Yelowitz, 2019). In a national comparison, Swedish brokers are highly educated which means that the threshold for becoming one is high, which arguably correlates with motivation, job satisfaction and employee turnover. For instance, previous studies indicate that brokerage attracts opportunity seekers due to work flexibility, income opportunities and low entry bars, which sometimes results in low occupational commitment (Jud and Winkler, 1999; Waller and Jubran, 2012). Hence, the high occupational threshold for Swedish brokers ought to reduce opportunity seekers lacking persistence. Another string of relevance is that about half of all Swedish brokers are employed by a brokerage firm, yet often work solely on commission (Ahlenius et al., 2021; Mäklarsamfundet, 2021). This means that Swedish brokers have more in common with sole proprietors (self-employed entrepreneurs without employees) than most employed sales personnel as their salaries are very seldom 100% commission based.

intrinsic

rewards

brokers and

Self-determination theory distinguishes between different types of motivation based on the different reasons or goals that give rise to an action (Deci and Ryan, 1985). The most basic distinction is between intrinsic motivation, which refers to doing something because it is inherently interesting or enjoyable, and extrinsic motivation, which refers to doing something because it leads to a separable outcome (Ryan and Deci, 2000). Intrinsic motivation is driven by forces from within the employee, while extrinsic motivation is driven by outside forces (Giancola, 2014).

Without intrinsic and especially extrinsic rewards (e.g. a salary), very few people would go to work every day, as money is a strong incentive for most people (Fehr and Falk, 2002; Lane, 1991). Hence, it comes as no surprise that understanding and controlling extrinsic rewards has received a lot of scholarly interest for over 100 years within management research. For example, Taylor (1911) called the connection between performance and salary scientific management. Other scholars call it rewards management (e.g. Armstrong, 2012). However, both Taylor and Armstrong argued for the necessity to recognize and compensate good performance and to provide incentives for improvement. A previous study conducted among Swedish real estate firm managers indicates that there is a connection between managers' subjective perception of financial and nonfinancial reward practices and firm performance (Azasu, 2009). The empirical setting of Azasu's study does not include brokerage. However, it is still interesting as it points to a necessity for managers to be aware that both financial and nonfinancial rewards affect performance.

Salaries constitute one type of monetary reward which differs both between and within occupations. This is particularly true within brokerage due to commission-based salaries. Previous studies stipulate that brokers are driven by extrinsic rewards, such as money (Crant, 1995; Jud and Winkler, 1999; Mosquera et al., 2020; Snyder et al., 2011; Waller and Jubran, 2012). Importantly, there are other studies that argue that compensation arrangements may not always be effective markers of brokers' productivity, and compensation incentives alone may not elicit greater effort and output (Zumpano et al., 2009). These two lines of reasoning might seem contradictory. An adequate reflection is therefore that making money and the possibility to impact the amount of money, to be acknowledged for extra effort (e.g. commission, bonus, positive appraisal (Waller and Jubran, 2012) and to strive for something more are two differentiated motivational strings, intertwined yet separate. For example, most Swedish brokers work on a commission-based salary (Mäklarsamfundet, 2021) as it is a job characteristic (Jacobsen et al., 2011; Winkler and Hughen, 2012). A commission within brokerage is an extrinsic reward connected to a specific object and effort, that is, moment in time. Therefore, the nature of satisfaction derived out of a commission/extrinsic reward is hedonic (Ryan and Deci, 2001; Ryan et al., 2008). On the other hand, receiving a commission is also a recognition of competence and boosts self-esteem/pride (Heywood et al., 2017; Verbeke et al., 2004). Viewed in combination with a self-determined sales budget (autonomy), this could be perceived as an intrinsic reward not connected to a specific/narrow moment in time. In total, this points to the fact that the satisfaction derived from commissions could also be more intrinsic and eudemonic in nature (Ryan and Deci, 2001; Ryan et al., 2008). Hence, nonfinancial rewards may serve to amplify the motivational impact of salary and bonuses (Azasu, 2009). This line of dependent and intertwined relationship reasoning between extrinsic and intrinsic motivation can be found in prior motivational studies (e.g. Ingram and Bellenger, 1983; Cerasoli et al., 2014).

There are indications in previous studies that commissions are perceived as both an extrinsic and intrinsic rewards. For instance, Ingram and Bellenger (1983) found that salespeople on commission-based compensation plans (performance-contingent extrinsic rewards) valued intrinsic motivation such as personal growth significantly higher than those salespeople on straight salary (performance noncontingent reward). Another example is a recent study conducted among high-performing brokers in Sweden which demonstrates that

making money is mentioned in a neutral manner and is perceived more as a necessary occupational hygiene factor (i.e. sine qua non), whereas sales numbers, personal growth and the possibility to impact one's salary (commission-based salary) are perceived and described as motivating (Ahlenius *et al.*, 2021). Accordingly, the large overlap between the concepts of reward and recognition leads to confusion (Silverman, 2004). This might be one reason why many organizations mainly ignore intrinsic rewards and motivation and continue to rely solely on financial rewards (Gratton, 2004; Silverman, 2004).

Extrinsic rewards are arguably important and satisfy a need among brokers regardless of whether the reward/commission is a consequence of a job characteristic/occupational pullfactor and/or connected to increased intrinsic motivation. However, as previously touched upon, some studies argue that extrinsic rewards are not the only thing that motivates brokers (Ahlenius et al., 2021; Mosquera et al., 2020; Silverman, 2004), as intrinsic, non-pecuniary incentives and rewards have been shown to influence work effort and performance (Frey, 1997; Fehr and Falk, 2002). Another motivational string of relevance particularly interesting for professional service providers like brokers are feelings connected to the superior job demand of establishing, maintaining and developing positive and long-lasting customer relations (Seiler et al., 2006). Some studies stipulate that customer relations are draining (Bryson, 2017; Snyder et al., 2011), whereas others claim that feelings of fulfillment and the enjoyment of being useful to the customer (customer orientation) have a direct positive effect on salespersons intrinsic motivation (Mallin and Pullins, 2009) and align with performanceorientation (Ahlenius et al., 2021; Goad and Jaramillo, 2014). This means that when addressing satisfaction with intrinsic rewards without explicit "occupational targets/ antecedents" among brokers as Mosquera et al. (2020) do, it is very possible that motivational perceptions and outcomes of working with customers are addressed.

In most work situations, people are motivated by both intrinsic and extrinsic motivators (Amabile, 1993). This statement is acknowledged in a motivational meta study where one conclusion is that intrinsic and extrinsic motivation can coexist without extrinsic motivation undermining intrinsic motivation (Cerasoli *et al.*, 2014). There is little consensus on exactly how best to motivate salespeople, and a continuing challenge remains, for example, regarding whether it is best to use financial incentives, nonfinancial rewards or rely on job design factors to generate intrinsic motivation (Khusainova *et al.*, 2018); however, one of the most recent meta studies in the field (Good *et al.*, 2022) shows that the effect of, especially, intrinsic motivation on performance is stronger than previously believed.

2.2 Job satisfaction

Job satisfaction is widely used in previous organizational and brokerage studies, as high levels of job satisfaction have positive effects for both parties such as well-being, performance, customer orientation, organizational/occupational commitment and turnover intentions/actual turnover (Aziri, 2011; Kaliski, 2007; Locke and Latham, 1990; Sirmans and Swicegood, 1997). In turn, job satisfaction is affected by self-efficiency, internal locus of control, self-esteem and emotional stability (Judge and Bono, 2001). Job satisfaction has been defined as people's self-assessment about the extent to which they like or dislike their job (Spector, 1997).

A worker entering an occupation and organization has needs, desires and experiences which create expectations that are either met or not by work-related characteristics/rewards (Aziri, 2011). However, job satisfaction is closely linked to the worker's behavior in the workplace (Davis and Nestrom, 1985). This is particularly important in brokerage settings, since the work brokers do is autonomous and largely consists of working with customers, and not with colleagues and bosses (Love *et al.*, 2011; Snyder *et al.*, 2011). This means that job satisfaction and managing it is difficult within a brokerage, as much of brokers' "behavior" is not easily observed or controllable from a managerial perspective, and many of the potentially positive effects of

brokers and

bosses (Mallin *et al.*, 2022) are negated. Regardless, previous studies have shown that SIR and/or SER have a positive effect on job satisfaction (Giancola, 2014; Haider *et al.*, 2015; Chew, 2005; Ghiselli *et al.*, 2001; Khan and Lashari, 2010). Consistent with this reasoning, we anticipate that both extrinsic and intrinsic rewards positively affect job satisfaction.

Hence, we propose:

- H1. SIR is positively associated with job satisfaction.
- H2. SER is positively associated with job satisfaction.

2.3 Turnover

Individuals choose a career based on a myriad of reasons (Waller and Jubran, 2012). Subsequently, there are many reasons why people decide to leave a job or are dismissed (Abelson, 1987). Turnover behavior is determined by turnover intention. Intention to turnover shows an individual's perceived probability of staying or leaving in an organization (Cotton and Tuttle, 1986). Since it takes at least two years of university studies to become a broker in Sweden, the likelihood of stumbling into the profession without any real idea of what the job entails is low. This ought to decrease turnover; however, within five years of registration 41% decide to leave the occupation in Sweden (Ahlenius *et al.*, 2022). One reason for this contradiction is that the perception of the job and the individual do not align with reality among new graduates (Larsen and Coleman, 2003). Alternatively formulated, the mismatch between what the job demands and supplies and workers' abilities and needs affects intended and actual turnover (Edwards *et al.*, 1991). The occupational life cycle of Swedish brokers does, however, appear to extend other sales occupations and be in line with engineers, for example (Ahlenius *et al.*, 2022).

The match between brokers' needs manifested through SIR and SER and what the job supplies is a strong antecedent of intended and actual turnover as indicated in previous studies. For example, SER (Rosenberg *et al.*, 1981; Lee *et al.*, 2014) and SIR (Mosquera *et al.*, 2020; Rosenberg *et al.*, 1981) affect intended and actual turnover. Based on this reasoning, we anticipate that both SIR and SER are negatively associated with turnover intentions.

Hence, we propose:

- H3. SIR is negatively associated with turnover intention.
- H4. SER is negatively associated with turnover intention.

Several preceding studies clearly state that job satisfaction affects turnover (Griffeth *et al.*, 2000; Lambert *et al.*, 2001; McNall *et al.*, 2009). Thus, we suggest:

H5. Job satisfaction is negatively associated with turnover intention.

Moreover, this study argues that job satisfaction mediates the relationship between turnover intentions and both SIR and SER. This is in line with Mosquera *et al.*'s (2020) study and their conceptual model (see Figure 1).

This study uses person-job/organization fit reasoning instead of social exchange theory as Mosquera does. Person-job/organization fit theory is preferred as it puts more emphasis on the fit between what the job/organization supplies (intrinsic and extrinsic rewards) and the needs of the individual (satisfaction with these rewards). There is a strong resemblance between this line of reasoning and self-determination theory, as focus is given within both theories to satisfaction of needs. Satisfaction of needs is manifested through job satisfaction, which, in turn, affects turnover intentions. Hence, focus is not given to the possibility that reduced turnover is an effect of reciprocal behavior due to satisfaction with reward management.

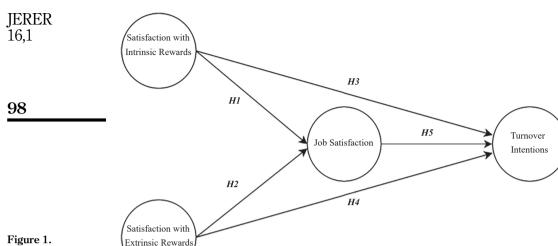


Figure 1. Conceptual model based on Mosquera et al.'s (2020) study

3. Method

Source(s): Mosquera et al. (2020)

As this is an empirical extension of Mosquera *et al.*'s article, it follows the same methodological schema and its choices. However, there is a need to be somewhat critical regarding the managerial perspective and the chosen measure for it. Mosquera *et al.*'s article focuses on managing SIR and SER, yet the chosen measure for SIR and SER that originates from Oyoo *et al.* (2016) is questionable as it primarily measures satisfaction with SIR and SER, and with not participants' satisfaction with managerial reward management. The decision was made to retain the SIR/SER measure in spite of these objections in order to maintain comparability between the two studies. There is a lack of occupational description, especially regarding compensation, in Mosquera *et al.*'s article, which makes it impossible to know if fluctuations in SIR/SER are primarily a consequence of occupational and individual characteristics or reward management, for example: Q1_3, *The reward system recognizes superior performance*, or Q1_6, *The responsibilities I have motivate me to remain*, or Q2_1, *I am satisfied with my pay*, or Q2_4, *I am satisfied with the bonuses I get in my job.*

In a Swedish brokerage context, variations in respondents' answers to these questions are arguably primary consequences of the occupational characteristics and brokers' actions, given a commission-based salary, and not reward management. Another string of criticism is that SIR and SER questions mostly use an organizational perspective, for example: Q1_8, My efforts are acknowledged in this organization. Whereas questions concerning job satisfaction and turnover intentions use a job perspective, for example: Q3_1; Generally speaking, I am very satisfied with my job, or Q4_1, I will probably look for a new job in the next year. Strictly speaking, it is possible to experience occupational satisfaction but not organizational satisfaction, and vice versa. There is a lack of distinction between job and organizational antecedents in prior studies within brokerage emphasizing job satisfaction and turnover intention, which is unfortunate as it reduces face validity (Ahlenius et al., 2022).

The hypotheses in this study were tested with partial least squares (PLS), using SmartPLS version 3.3.3. As this study is explorative in nature, choosing PLS for structural equation modeling (SEM) is better as it has provided reliable estimates in situations where other SEM

rewards

brokers and intrinsic

methods have failed (Henseler et al., 2014). The choice of PLS was reinforced as most of the original variables in this study do not follow a normal distribution (Ringle et al., 2015).

3.1 Data collection and sample

The population of brokers in Sweden at the time of questionnaire distribution was 3,440 women and 4,053 men, for a total of 7,493 brokers (Fastighetsmäklarinspektionen, 2021). Due to restrictions in time and that there was an established contact with a couple of brokerage companies, the online questionnaire was sent to 21 of Sweden's approximately 200 brokerage companies, reaching a total of 4,497 brokers. These companies list mainly residential properties for sale. The response rate was 20.7%, resulting in a total of 932 answers from respondents, of which 910 were valid, and of which 461 were women (50.6%), 446 were men (49%) and 3 did not want to communicate their gender (0.003%). About half of the respondents (453) were between 18 and 35 years (49.7%), and the other half (457) were 36 years or older (50.2%). To comply with anonymity guarantees, we did not collect more personal data.

3.2 Measures

The questionnaire used in this study was part of a larger omnibus, and collected more data than used in this study. Therefore, sections do not come in order as in Mosquera *et al.*'s article. All questions can be found in Appendix 1. The first section is composed of demographic variables, namely, age and gender. In Mosquera *et al.*'s study, there is a question about the level of education. This question was not asked as since 1999, a two-year university education is required to work as a broker in Sweden (Proposition, 1994/95, p. 14). The second section consists of questions about SIR and SER. One SER question that has to do with paid overtime was deleted as paid overtime does not exist for Swedish brokers. The fourth section consists of questions about job satisfaction and turnover intention.

SIR and SER are measured by a 19-item scale developed by Oyoo *et al.* (2016). Of these, 10 items measure SIR, and the other nine items measure SER. Job satisfaction is measured by five items of the Hackman and Oldham (1980) Job Diagnostic Survey. Turnover intention is measured by a three-item scale developed by Cammann *et al.* (1979), which is included in the Michigan Organizational Assessment Questionnaire. A five-point Likert scale was used, where (1) corresponds to "totally disagree" and (5) to "totally agree." The scales were originally in English and were translated into Swedish and then translated back into English, to ensure item similarity in the two languages (Brislin, 1986). Translation into Swedish was made with Mosquera *et al.*'s article in mind to obtain comparability (Choi and Pak, 2005). A pre-test was conducted to ensure the precision of the instrument.

4. Results

4.1 Descriptive analysis

Our conceptual replication (Lynch *et al.*, 2015) included the same items as Mosquera *et al.* (2020), and the data were scrutinized for items of poor reliability. Two items concerning job satisfaction were thus omitted from further analysis. This meant that the analysis included the same items as the original analysis. Outer loadings between 0.4 and 0.7 were also subject to a comparison with the average variance extracted (AVE), and such loadings were all above 0.5, thus not having to be omitted (Hair *et al.*, 2017).

4.2 Measurement reliability and validity

The latent variables all have composite reliabilities above the acceptable 0.7 threshold (Fornell and Larcker, 1981; Hair et al., 2011), indicating acceptable construct reliability (see

100

Appendix 2). The AVE also exceeded the 0.5 level for all the latent variables concerning convergent validity (Fornell and Larcker, 1981). As a sign of high convergent validity, the bootstrap analysis *t*-statistics were also found to be significant at the 1% significance level (Anderson and Gerbing, 1988).

Discriminant validity was studied using the square root of the AVE (Fornell and Larcker, 1981), with the correlation for each pair of latent variables. For all the pairs, the square root of the AVE was higher than the correlations (see Appendix 3). This indicates that each latent variable shares more variance with its own measurement than with the other constructs. This put together indicates discriminant validity.

4.3 Model estimation results

Since the analysis of measurement model shows evidence of reliability and validity, the structural model was analyzed with SmartPLS to test the hypothesis (Henseler et al., 2014).

Hypothesis 1 is validated as SIR has a positive and significant effect on job satisfaction. Hypothesis 2 is not validated as SER does not have a significant effect on job satisfaction. Hypothesis 3 is not validated as SIR does not have a significant effect on turnover intention. Hypothesis 4 is validated as SER has a significant effect on turnover intention. Hypothesis 5 is validated as job satisfaction has a significant effect on turnover intention.

The results of this study are therefore partly in line with the studies by Mosquera *et al.* (2020) and Hofmans *et al.* (2013). There are, however, three interesting areas where differences in path coefficients between the samples admit speculations, as shown in Table 1.

First, the strength of the path coefficient between SIR and job satisfaction (H1) is stronger in the Swedish sample (b = 0.869; p < 0.000) compared to Mosquera et~al.'s study (b = 0.328; p < 0.000). On the other hand, the path coefficient between SER and job satisfaction (H2) is weaker (b = 0.0015; p < 0.000) in the Swedish sample compared to Mosquera et~al.'s study (b = 0.526; p < 0.000), which is not in line with prior studies (Crant, 1995; Snyder et~al., 2011). This could indicate that intrinsic rewards are either much more prevalent within Swedish brokerage (leading to SIR) or that Swedish brokers are more driven by intrinsic rewards (leading to SIR) compared to Portuguese brokers. It could also indicate that extrinsic rewards are not as prevalent (leading to reduced SER) within Swedish brokerage as in Portuguese brokerage, or that Portuguese brokers are much more driven by extrinsic rewards (leading to increased SER). However, given the high threshold for becoming a Swedish broker and the fact that most of them work solely on commission, it seems unlikely that SER is not part of job satisfaction at all.

Criterion	Predictors	R^2	R^2 adjusted	Q^2	β (path coefficient)	Bootstrap <i>t</i> -test	<i>p</i> -value	f
Iob	SER.S	0.778	0.777	0.366	0.015	0.180	0.857	0.000
satisfaction	SER.P	0.628	0.625	0.322	0.526	8.094	0.000	0.371
	SIR.S	0.778	0.777		0.869	11.318	0.000	0.012
	SIR.P				0.328	4.326	0.000	0.144
Turnover	SER.S	0.475	0.473	0.276	-0.227	2.084	0.037	0.023
intention	SER.P	0.549	0.543	0.475	-0.258	3.138	0.002	0.054
	SIR.S	0.475	0.475		-0.218	1.371	0.171	0.023
	SIR.P		0.473		-0.235	3.122	0.002	0.054
	Job satisfaction.S		0.473		-0.696	5.952	0.000	0.205
	Job satisfaction.P		0.473		-0.326	3.626	0.000	0.087
**	0 1 1		1 (0000)					

Table 1. Structural model results and effect sizes

Note(s): $f^2 = .S$, whereas Mosquera *et al.*'s (2020) result = .P, for example SER:S stands for satisfaction with extrinsic rewards among Swedish brokers **Source(s):** Own

intrinsic

Real estate

brokers and

Hence, another way of explaining these path coefficients is to argue that SER fluctuations are primarily a consequence of a commission-based salary and individual effort in a Swedish context which could make SER part of SIR and/or job satisfaction. This would be in line with prior motivational studies (Ahlenius *et al.*, 2021; Ingram and Bellenger, 1983; Cerasoli *et al.*, 2014). However, it is also possible that working more/harder in order to increase ones pay/SER has a negative effect on job satisfaction beyond a subjective breaking point.

Second, the strength of the path coefficients between SIR/SER, respectively, on turnover intentions (H3, H4) is even smaller in the Swedish sample, and in the case of SIR and turnover, it is even smaller. One explanation to this is that, as previously stated, SER is embedded in job satisfaction and SIR, which might lead to higher path coefficient between job satisfaction and turnover intention. SIR is another story. It is possible that both SIR and SER are actually measuring facets of job satisfaction, which could be why the path correlations between SIR/SER and turnover intention in both the Swedish and Portuguese sample are modest, whereas the effect of job satisfaction on turnover intention is higher. This is indicated in the explorative factor analysis as SIR, SER and job satisfaction are fused as one factor. Mosquera et al. (2020) argue that a reason for the low effect of rewards on turnover intention is that turnover is caused by other constructs that ought to be included in future studies, such as salary level. This line of reasoning is somewhat contradictory as one SER question is, "Im happy with my pay"; further studies ought to look into and try to discern between these concepts.

Third, the strength of the path coefficient between job satisfaction and turnover intention is higher in the Swedish sample (b = 0.696; p < 0.000) compared to the Portuguese (b = 0.326; p < 0.000). This could be a consequence of a higher person-job fit (Edwards *et al.*, 1991) derived from more accurate work expectations and knowledge due to the targeted brokerage education. Higher person-job fit ought to increase job satisfaction and lower turnover intentions. This is partly in line with prior studies (Crellin *et al.*, 1988; Larsen and Coleman, 2003). However, it might also be consequential for overall working conditions and other job possibilities.

Measuring intrinsic and extrinsic motivation is not the same as measuring satisfaction with management of intrinsic and extrinsic rewards as previously stated. It is better to start by defining and measuring what aspects and facets of brokerage are perceived as intrinsically and extrinsically motivating, and then explore whether these motivational factors can be managed successfully. This line of reasoning is present in Mosquera *et al.*'s (2020) takeaway for HRM practitioners. Done otherwise, there is an obvious risk of trying to measure something that is out of managerial control, that is, reward management/managers have influence over SER and SIR connected to the organization, yet a modest possibility to influence occupational SER and SIR. This is particularly true in a short-term perspective. A reflection on the SIR/SER measurements is that they do *not* (1) separate job and organization, (2) target satisfaction with management of rewards or (3) build on clear definitions about what is intrinsically motivating within brokerage.

Regardless of measurements, given that this study is a replication with a larger sample, the differences are somehow consequences of contextual differences.

Since this is an empirical generalization of Mosquera *et al.*'s (2020) article, data were further explored likewise by dividing it according to demographic characteristics of gender and age. Age of the broker is not to be seen as the same as experience, as it is possible to start working as a broker in Sweden at the age of 20 or 21, given the educational requirements. However, it is more likely that brokers over age 36 have more experience than brokers under 35, since the average age of brokers getting their license is about 24.

There are four interesting areas where differences in path coefficients between the groups admit speculations, as shown in Table 2.

JERER 16.1

102

First, SER affects job satisfaction more among men. This result is similar to Mosquera *et al.*'s results, yet the differences between gender are much bigger in the Swedish sample. It is noteworthy that SER has a negative effect on job satisfaction among women, which is not in line with Mosquera *et al.*'s study. This is an area for future studies. It is possible that younger men are more driven by extrinsic rewards compared to women. It is also possible that the households are more depending on the male income. And last, it is also possible that women feel that the increased amount of work needed to increase pay is not worth it.

Contrary to studies by Mosquera *et al.* (2020) and Gieter and Hofmans (2015), SER has a stronger effect on job satisfaction among younger brokers. It is possible that younger brokers are more willing to work much in order to increase their pay, as they value money more than time. It is also possible that extrinsic rewards are more important for younger/rookie brokers since commissions is one of the key characteristics/outcome of brokerage that is easily measured. Put differently, increased commissions might be perceived as a subjective sign of competence.

Second, SIR has a stronger effect on job satisfaction among women, which is in line with Mosquera *et al.*'s study. SIR has a stronger effect on job satisfaction among older brokers, which is not in line with Mosquera *et al.*'s study. However, it makes sense that when experience goes hand in hand with job satisfaction, the combination reduces turnover intention.

Third, SER has a much stronger effect on turnover intention among women. This is particularly interesting as it seems contradictory, since SER affects job satisfaction negatively among women as previously stated. Prior studies argue that extrinsic rewards such as wages increase with experience (Benjamin et al., 2009). This study might corroborate that since SER has a stronger effect on turnover intention among older brokers.

Fourth, SIR has a much stronger effect on turnover intention for women. It is interesting that almost all path coefficients in this study are stronger for women compared to men, indicating that the subjective perception of brokerage differs between gender.

It is notable that SIR affects almost all outcomes more than SER, regardless of demographic characteristics. This is interesting since it is not in line with assumptions made in prior studies (Crant, 1995; Munneke and Yavas, 2001; Snyder *et al.*, 2011; Winkler and Hughen, 2012), though fully in line with more recent studies (Good *et al.*, 2022).

Criterion	Predictors	β (path coefficient) Women	β (path coefficient) Men	β (path coefficient) Age 18–35	β (path coefficient) Age 36-
Job satisfaction	SER	-0.107	0.153	0.216	-0.129
	SIR	0.979	0.740	0.694	0.996
Turnover intention	SER	-0.369	-0.026	-0.108	-0.329
	SIR	-0.483	-0.087	-0.171	-0.221
	Job	-0.804	-0.612	-0.792	-0.563
	satisfaction				

Table 2. Structural model results and effect sizes between groups

Note(s): Since turnover intention is not used in Mosquera *et al.'s* article as a criterion when data are divided according to gender and age, comparison becomes impossible **Source(s):** Own

intrinsic

rewards

brokers and

5. Conclusion

The purpose of this study is to evaluate the role of satisfaction with both intrinsic rewards and extrinsic rewards on job satisfaction and turnover intention in the Swedish real estate brokerage industry. The results of this empirical generalization study reveal that there are differences between a Portuguese and Swedish brokerage context. The most interesting difference between the samples is that Swedish brokers display much higher levels of satisfaction with intrinsic rewards, which affects job satisfaction, which, in turn, strongly affects turnover intention. On the other hand, Swedish brokers appear to be less driven by extrinsic rewards, which is not in line with prior studies (Crant, 1995; Jud and Winkler, 1999; Snyder *et al.*, 2011; Waller and Jubran, 2012). This is interesting as it strengthens the argument that intrinsic rewards/motivation within brokerage are prevailing and therefore important to study (Ahlenius *et al.*, 2021; Good *et al.*, 2022; Mosquera *et al.*, 2020; Zumpano *et al.*, 2009). The results of this study indicate that the motivational perception of brokers and brokerage has been oversimplified. This is partly a consequence of the fact that too much attention has been given to extrinsic rewards at the expense of intrinsic rewards in prior studies.

One explanation for the high levels of satisfaction with intrinsic rewards is that being a broker in Sweden is preferable, and perceived as such by brokers, compared to brokerage in other countries, for example Portugal, as indicated by Mosquera *et al.* (2020). High level of satisfaction with work-related intrinsic rewards is often seen as an antecedent of reducing turnover intention and actual turnover. One way to further explore this in future studies is to compare brokers' occupational life cycles between countries.

In future motivational studies, specific attention should be given to exploring which aspects of brokerage are intrinsically motivating and to whom, that is, personality traits. Future motivational studies among brokers could also benefit from using other measurements of motivation and particularly measurements that separate job and organization. Future studies should take into account the contextual setting of brokerage, as national differences such as salary system (commission, fixed salary, mixed), education, job demands/characteristics and legal framework. will affect not only who is motivated by brokerage but also why.

Takeaway for practitioners: Extrinsic rewards are important for almost all workers. However, working on commission is somewhat different as it allows rapid fluctuations and might serve as competence/competitive feedback. These fluctuations might therefore be perceived as straining or beneficial depending on the broker's personality and experience, for example. Hence, managers and students should be aware that commission-based salary systems are not suitable for all brokers. This does not mean that brokers who are not driven by a commission-based salary system are less suited for brokerage; this study indicates that satisfaction with intrinsic rewards heavily affects job satisfaction, whereas satisfaction with extrinsic rewards does not. On the other hand, satisfaction with extrinsic rewards slightly reduces turnover intentions, which is an indication that the job characteristics of commission-based salary are perceived as a positive aspect of brokerage by some.

Managers and students should pay extra attention to what aspects of brokerage are perceived as intrinsically motivating. Knowledge and awareness about preferred salary systems and parts of brokerage could be used by managers and students to increase knowledge about what the job supplies and thereby increase person-job fit/performance/persistence through satisfaction of needs.

References

Ahlenius, M., Berggren, B. and Kågström, J. (2021), "Exploring motivational factors among high performing real estate brokers: the Swedish case", *Journal of Real Estate Practice and Education*, Vol. 23 No. 1, pp. 20-37, doi: 10.1080/15214842.2021.2006892.

- Abelson, M.A. (1987), "Examination of avoidable and unavoidable turnover", *Journal of Applied Psychology*, Vol. 72 No. 3, p. 382.
- Ahlenius, M., Berggren, B., Gerdemark, T., Kågström, J. and Åge, L.-J. (2022), "The occupational life cycle of real estate brokers: a cohort study", *Journal of European Real Estate Research*, Vol. 15 No. 3, pp. 351-367, doi: 10.1108/JERER-01-2022-0001.
- Amabile, T.M. (1993), "Motivational synergy: toward new conceptualizations of intrinsic and extrinsic motivation in the workplace", *Human Resource Management Review*, Vol. 3 No. 3, pp. 185-201.
- Anderson, J.C. and Gerbing, D.W. (1988), "Structural equation modeling in practice: a review and recommended two-step approach", Psychological Bulletin, Vol. 103 No. 3, p. 411.
- Armstrong, M. (2012), Armstrong's Handbook of Reward Management Practice, 4th ed., Kogan Page, London.
- Azasu, S. (2009), "Rewards and performance of Swedish real estate firms", *Compensation and Benefits Review*, Vol. 41 No. 4, pp. 19-28, doi: 10.1177/0886368709337924.
- Aziri, B. (2011), "Job satisfaction: a literature review", Management Research and Practice, Vol. 3 No. 4, pp. 77-86.
- Benjamin, J.D., Chinloy, P. and Winkler, D.T. (2009), "Labor supply, flexible hours and real estate agents", Real Estate Economics, Vol. 37 No. 4, pp. 747-767.
- Benjamin, J.D., Jud, G.D. and Sirmans, G.S. (2000), "What do we know about real estate brokerage?", Journal of Real Estate Research, Vol. 20 Nos 1/2, p. 5.
- Boles, J.S., Dudley, G.W., Onyemah, V., Rouziès, D. and Weeks, W.A. (2012), "Sales force turnover and retention: a research agenda", *Journal of Personal Selling and Sales Management*, Vol. 32 No. 1, pp. 131-140, doi: 10.2753/PSS0885-3134320111.
- Brislin, R.W. (1986), "The wording and translation of research instruments", in Lonner, W.J. and Berry, J.W. (Eds), Field Methods in Cross-Cultural Research, Sage, Beverly Hills, CA, pp. 137-164.
- Bryson, A. (2017), "Review culture and the growing significance of customer evaluation in service work: a qualitative study of real estate brokers and their work", Dissertation, University of North Carolina at Chapel Hill.
- Cammann, C., Fichman, M., Jenkins, D. and Klesh, J. (1979), *The MI Organizational Assessment Questionnaire*, Unpublished manuscript, University of Michigan, Ann Arbor, MI.
- Cerasoli, C.P., Nicklin, J.M. and Ford, M.T. (2014), "Intrinsic motivation and extrinsic incentives jointly predict performance: a 40-year meta-analysis", *Psychological Bulletin*, Vol. 140 No. 4, pp. 980-1008, doi: 10.1037/a0035661.
- Chew, Y.T. (2005), "Achieving organisational prosperity through employee motivation and retention: a comparative study of strategic HRM practices in Malaysian institutions", Research and Practice in Human Resource Management, Vol. 13 No. 2, pp. 87-104.
- Choi, B.C.K. and Pak, A.W.P. (2005), "A catalog of biases in questionnaires", *Preventing Chronic Disease*, Vol. 2 No. 1, pp. 1-13.
- Cooke, E.F. (1999), "Control and motivation in sales management through the compensation plan", Journal of Marketing Theory and Practice, Vol. 7 No. 1, pp. 80-83, doi: 10.1080/10696679.1999. 11501822.
- Cotton, J.L. and Tuttle, J.M. (1986), "Employee turnover: a meta-analysis and review with implications for research", The Academy of Management Review, Vol. 11 No. 1, pp. 55-70.
- Crant, J.M. (1995), "The proactive personality scale and objective job performance among real estate agents", Journal of Applied Psychology, Vol. 80 No. 4, pp. 532-537, doi: 10.1037//0021-9010.80.4.532.
- Crellin, G., Frew, J. and Jud, D. (1988), "The earnings of REALTORS: some empirical evidence", *Journal of Real Estate Research*, Vol. 3 No. 2, pp. 69-78, doi: 10.1080/10835547.1988.12090552.
- Davis, K. and Nestrom, J.W. (1985), Human Behavior at Work: Organizational Behavior, 7th ed., McGraw Hill, New York, p. 109.

intrinsic

rewards

brokers and

- Deci, E.L. (1976), "The hidden costs of rewards", Organizational Dynamics, Vol. 4, pp. 61-72, doi: 10. 1016/0090-2616(76)90036-X.
- Deci, E.L. and Ryan, R.M. (1985), "The general causality orientations scale: self-determination in personality", Journal of Research in Personality, Vol. 19 No. 2, pp. 109-134, doi: 10.1016/0092-6566(85)90023-6.
- Deci, E.L. and Ryan, R.M. (2000), "The what' and why of goal pursuits: human needs and the self-determination of behavior", *Psychological Inquiry*, Vol. 11 No. 4, pp. 227-268, doi: 10.1207/S15327965PLI1104_01.
- Deci, E.L. and Ryan, R.M. (2014), "Autonomy and need satisfaction in close relationships: relationships motivation theory", in Weinstein, N. (Ed.), Human Motivation and Interpersonal Relationships, Springer, pp. 53-77.
- Dunlap, B.J., Dotson, M.J. and Chambers, T.M. (1988), "Perceptions of real-estate brokers and buyers: a sales-orientation, customer-orientation approach", *Journal of Business Research*, Vol. 17 No. 2, pp. 175-187, doi: 10.1016/0148-2963(88)90050-1.
- Edwards, J.R., Cable, D.M., Williamson, I.O., Lambert, L.S. and Shipp, A.J. (1991), "The phenomenology of fit: linking the person and environment to the subjective experience of person–environment fit", *Journal of Applied Psychology*, Vol. 91 No. 4, pp. 802-827.
- Fastighetsmäklarinspektionen (2021), "Registrerade fastighetsmäklare—31 januari 2021", available at: https://fmi.se/media/dttnwpvh/registrerade_fastighetsmaklare_2021-01-31.pdf
- Fehr, E. and Falk, A. (2002), "Psychological foundations of incentives", European Economic Review, Vol. 46, pp. 687-724.
- Fornell, C. and Larcker, D.F. (1981), "Structural equation models with unobservable variables and measurement error: algebra and statistics", *Journal of Marketing Research*, Vol. 18 No. 3, pp. 328-388.
- Frey, B.S. (1997), "On the relationship between intrinsic and extrinsic work motivation", *International Journal of Industrial Organization*, Vol. 15 No. 4, pp. 427-439, doi: 10.1016/S0167-7187(96)01028-4.
- Ghiselli, R.F., La Lopa, J.M. and Bai, B. (2001), "Job satisfaction, life satisfaction, and turnover intent: among food-service managers", Cornell Hotel and Restaurant Administration Quarterly, Vol. 42 No. 2, pp. 28-37, doi: 10.1177/0010880401422002.
- Giancola, F.L. (2014), "Should HR professionals devote more time to intrinsic rewards?", Compensation and Benefits Review, Vol. 46 No. 1, pp. 25-31, doi: 10.1177/0886368714537446.
- Gieter, S. and Hofmans, J. (2015), "How reward satisfaction affects employees' turnover intentions and performance: an individual differences approach", *Human Resource Management Journal*, Vol. 25 No. 2, pp. 200-216.
- Glower, M. and Hendershott, P. (1988), "The determinants of REALTOR income", *Journal of Real Estate Research*, Vol. 3 No. 2, pp. 53-68, doi: 10.1080/10835547.1988.12090555.
- Goad, E.A. and Jaramillo, F. (2014), "The good, the bad and the effective: a meta-analytic examination of selling orientation and customer orientation on sales performance", *Journal of Personal Selling and Sales Management*, Vol. 34 No. 4, pp. 285-301, doi: 10.1080/08853134.2014.899471.
- Good, V., Hughes, D.E., Kirca, A.H. and McGrath, S. (2022), "A self-determination theory-based metaanalysis on the differential effects of intrinsic and extrinsic motivation on salesperson performance", *Journal of the Academy of Marketing Science*, Vol. 50 No. 3, pp. 586-614.
- Good, V., Hughes, D.E. and Wang, H. (2021), "More than money: establishing the importance of a sense of purpose for salespeople", *Journal of the Academy of Marketing Science*. doi: 10.1007/ s11747-021-00795-x.
- Gratton, L. (2004), "More than money", People Management, 29 January, p. 23.
- Griffeth, R.W., Hom, P.W. and Gaertner, S. (2000), "A meta-analysis of antecedents and correlates of employee turnover: update, moderator tests, and research implications for the next millennium", *Journal of Management*, Vol. 26 No. 3, pp. 463-488.

- Hackman, J.R. and Oldham, G.R. (1980), Work Redesign, Addison-Wesley, Reading, MA.
- Haider, M., Aamir, A., Hamid, A.A. and Hashim, M. (2015), "A literature analysis on the importance of non-financial rewards for employees' job satisfaction", *Abasyn Journal of Social Sciences*, Vol. 8 No. 2, pp. 341-354.
- Hair, Matthews, L.M., Matthews, R.L. and Sarstedt, M. (2017), "PLS-SEM or CB-SEM: updated guidelines on which method to use", *International Journal of Multivariate Data Analysis*, Vol. 1 No. 2, pp. 107-123.
- Hair, J.F., Ringle, C.M. and Sarstedt, M. (2011), "PLS-SEM: indeed a silver bullet", Journal of Marketing Theory and Practice, Vol. 19 No. 2, pp. 139-152.
- Henseler, J., Dijkstra, T.K., Sarstedt, M., Ringle, C.M., Diamantopoulos, A., Straub, D.W., Ketchen, D.J., Hair, J.F., Hult, G.T.M. and Calantone, R.J. (2014), "Common beliefs and reality about PLS: comments on rönkkö and evermann (2013)", Organizational Research Methods, Vol. 17 No. 2, pp. 182-209, doi: 10.1177/1094428114526928.
- Heywood, J.S., Jirjahn, U. and Struewing, C. (2017), "Locus of control and performance appraisal", *Journal of Economic Behavior and Organization*, Vol. 142, pp. 205-225, doi: 10.1016/j.jebo.2017.06.011.
- Hofmans, J., De Gieter, S. and Pepermans, R. (2013), "Individual differences in the relationship between satisfaction with job rewards and job satisfaction", *Journal of Vocational Behavior*, Vol. 82 No. 1, pp. 1-9, doi: 10.1016/j.jvb.2012.06.007.
- Ingram, T.N. and Bellenger, D.N. (1983), "Personal and organizational variables: their relative effect on reward valences of industrial salespeople", *Journal of Marketing Research*, Vol. 20 No. 2, pp. 198-205, doi: 10.2307/3151686.
- Ingram, S.J. and Yelowitz, A. (2019), "Real estate agent dynamism and licensing entry barriers", Journal of Entrepreneurship and Public Policy, Vol. 10 No. 2, pp. 156-174, doi: 10.1108/JEPP-07-2019-0063.
- Jacobsen, K.J., Eika, K.H., Helland, L., Lind, J.T. and Nyborg, K. (2011), "Are nurses more altruistic than real estate brokers?", *Journal of Economic Psychology*, Vol. 32 No. 5, pp. 818-831, doi: 10.1016/j. joep.2011.07.003.
- Jud, D. and Winkler, D. (1999), "A model of real estate sales as a career choice", *Journal of Real Estate Research*, Vol. 18 No. 3, pp. 481-490, doi: 10.1080/10835547.1999.12091006.
- Judge, T.A. and Bono, J.E. (2001), "Relationship of core self-evaluations traits—self-esteem, generalized self-efficacy, locus of control, and emotional stability—with job satisfaction and job performance: a meta-analysis", *Journal of Applied Psychology*, Vol. 86 No. 1, pp. 80-92, doi: 10.1037/0021-9010.86.1.80.
- Kaliski, B.S. (2007), Encyclopedia of Business and Finance, 2nd ed., Thompson Gale, Detroit, p. 446.
- Khan, M.R. and Lashari, J.A. (2010), "Effect of job rewards on job satisfaction, moderating role of age differences: an empirical evidence from Pakistan", African Journal of Business Management, Vol. 4 No. 6, pp. 1131-1139.
- Khusainova, R., de Jong, A., Lee, N., Marshall, G.W. and Rudd, J.M. (2018), "(Re) defining salesperson motivation: current status, main challenges, and research directions", *Journal of Personal Selling and Sales Management*, Vol. 38 No. 1, pp. 2-29, doi: 10.1080/08853134.2017. 1415761.
- Kooij, D.T., van Woerkom, M., Wilkenloh, J., Dorenbosch, L. and Denissen, J.J. (2017), "Job crafting towards strengths and interests: the effects of a job crafting intervention on person–job fit and the role of age", *Journal of Applied Psychology*, Vol. 102 No. 6, p. 971.
- Lambert, E.G., Hogan, N.L. and Barton, S.M. (2001), "The impact of job satisfaction on turnover intent: a test of a structural measurement model using a national sample of workers", *The Social Science Journal*, Vol. 38 No. 2, pp. 233-250.
- Lane, R. (1991), The Market Experience, Cambridge University Press, Cambridge, doi: 10.1017/ CBO9780511625664.

intrinsic

rewards

brokers and

- Larsen, J. and Coleman, J. (2003), "Factors associated with survival of new Ohio REALTOR Associates®", Journal of Real Estate Practice and Education, Vol. 6 No. 2, pp. 163-190, doi: 10. 1080/10835547.2003.12091596.
- Lee, C.-C., Wu, Y.-Y., Chen, Y.-L., Kao, P.-F. and Feng, W.-K. (2014), "The impact of work-family conflicts, coworker relationships and salary levels on turnover intention: using real estate brokers as examples", *Journal of Information and Optimization Sciences*, Vol. 35 No. 2, pp. 143-166, doi: 10.1080/02522667.2013.867738.
- Locke, E.A. and Latham, G.P. (1990), A Theory of Goal Setting and Task Performance, Prentice Hall, Englewood Cliffs, NJ.
- Love, P.E.D., Goh, Y.M., Hogg, K., Robson, S. and Irani, Z. (2011), "Burnout and sense of coherence among residential real estate brokers", Safety Science, Vol. 49 No. 10, doi: 10.1016/j.ssci.2011. 04.009.
- Lynch, J.G. Jr, Bradlow, E.T., Huber, J.C. and Lehmann, D.R. (2015), "Reflections on the replication corner: in praise of conceptual replications", *International Journal of Research in Marketing*, Vol. 32 No. 4, pp. 333-342.
- Mäklarsamfundet (2021), "Fakta och nyckeltal 2020", available at: https://www.maklarsamfundet.se/sites/default/files/Media%20Opinion/pdf/Fakta%20och%20Nyckeltal%202020_1.pdf
- Mallin, M.L. and Pullins, E.B. (2009), "The moderating effect of control systems on the relationship between commission and salesperson intrinsic motivation in a customer oriented environment", *Industrial Marketing Management*, Vol. 38 No. 7, pp. 769-777, doi: 10.1016/j.indmarman.2008. 03.004.
- Mallin, M.L., Hancock, T.D., Pullins, E.B. and Gammoh, B.S. (2022), "Salesperson's perceived personal identification with supervisor and the relationship with turnover intention and performance: a mediated motivation model", *Journal of Personal Selling and Sales Management*, Vol. 42 No. 3, pp. 243-264.
- McNall, L.A., Masuda, A.D. and Nicklin, J.M. (2009), "Flexible work arrangements, job satisfaction, and turnover intentions: the mediating role of work-to-family enrichment", *The Journal of Psychology*, Vol. 144 No. 1, pp. 61-81.
- Mitchell, T.R. (1982), "Motivation: new directions for theory, research, and practice", Academy of Management Review, Vol. 7 No. 1, pp. 80-88.
- Mosquera, P., Soares, M.E. and Oliveira, D. (2020), "Do intrinsic rewards matter for real estate agents?", Journal of European Real Estate Research, Vol. 13 No. 2, pp. 207-222, doi: 10.1108/JERER-12-2019-0051.
- Munneke, H. and Yavas, A. (2001), "Incentives and performance in real estate brokerage", Journal of Real Estate Finance and Economics, Vol. 22 No. 1, pp. 5-21, doi: 10.1023/A:1007879109026.
- Oyoo, M.O., Mwandihi, N.K. and Musiega, D. (2016), "Influence of reward systems on employee retention in faith based health organizations in Kenya: a case of Mukumu Hospital, Kenya", *International Journal of Commerce and Management Research*, Vol. 2 No. 10, pp. 42-51.
- Palmatier, R.W., Dant, R.P., Grewal, D. and Evans, K.R. (2006), "Factors influencing the effectiveness of relationship marketing: a meta-analysis", *Journal of Marketing*, Vol. 70 No. 4, pp. 136-153.
- Pattanawit, P. and Charoensukmongkol, P. (2022), "Benefits of workplace spirituality on real estate agents' work outcomes: the mediating role of person-job fit", *Management Research Review*, Vol. 45 No. 11, pp. 1393-1411.
- Proposition (1994/95), *Justitiedepartementet.* (1994). Ny Fastighetsm€aklarlag. (Prop. 1994/1995:14), Regeringskansliet, available at: https://www.riksdagen.se/sv/dokument-lagar/dokument/proposition/ny-fastighetsmaklarlag_GI0314
- Ringle, C.M., Wende, S. and Becker, J.-M. (2015), SmartPLS 3, SmartPLS GmbH, Bönningstedt.
- Rosenberg, L.J., Gibson, C.K. and Epley, D.B. (1981), "How to retain real estate sales people: what things work", *Journal of Personal Selling and Sales Management*, Vol. 1 No. 2, pp. 36-43.

- Rotter, J.B. (1966), "Generalized expectancies for internal versus external control of reinforcement", *Psychological Monographs: General and Applied*, Vol. 80 No. 1, pp. 1-28, doi: 10.1037/h0092976.
- Ryan, R.M. and Deci, E.L. (2000), "Intrinsic and extrinsic motivations: classic definitions and new directions", Contemporary Educational Psychology, Vol. 25 No. 1, pp. 54-67, doi: 10.1006/ceps. 1999.1020.
- Ryan, R.M. and Deci, E.L. (2001), "On happiness and human potentials: a review of research on hedonic and eudaimonic well-being", *Annual Review of Psychology*, Vol. 52 No. 1, pp. 141-166, doi: 10.1146/annurev.psych.52.1.141.
- Ryan, R.M., Huta, V. and Deci, E.L. (2008), "Living well: a self-determination theory perspective on eudaimonia", *Journal of Happiness Studies*, Vol. 9 No. 1, pp. 139-170, doi: 10.1007/s10902-006-9023-4.
- Seiler, V.L., Seiler, M.J. and Webb, J.R. (2006), "Impact of homebuyer characteristics on service quality in real estate brokerage", *International Real Estate Review*, Vol. 9 No. 1, pp. 44-61, doi: 10.53383/ 100068.
- Silverman, M. (2004), "Non-financial Recognition", the Most Effective of Rewards, Institute for Employment Studies, Brighton.
- Sirmans, G. and Swicegood, P. (1997), "Determinants of real estate licensee income", *Journal of Real Estate Research*, Vol. 14 No. 2, pp. 137-153, doi: 10.1080/10835547.1997.12090897.
- Snyder, J.L., Claffey, G.F. and Cistulli, M.D. (2011), "How similar are real estate agents and humanservice workers?: a study of real estate agents' responses to distressed clients", *Journal of Business Communication*, Vol. 48 No. 3, pp. 300-318, doi: 10.1177/0021943611406275.
- Spector, P.E. (1997), Job Satisfaction: Application, Assessment, Causes, and Consequences, Vol. 3, Sage.
- Stewart, G.L. (1996), "Reward structure as a moderator of the relationship between extraversion and sales performance", *Journal of Applied Psychology*, Vol. 81, pp. 619-627.
- Taylor, F.W. (1911), The Prinicples of Scientific Management, DoverPublications, New York.
- Tsang, E.W.K. and Kwan, K.-M. (1999), "Replication and theory development in organizational science: a critical realist perspective", *The Academy of Management Review*, Vol. 24 No. 4(Oct. 1999), pp. 759-780.
- Verbeke, W., Belschak, F. and Bagozzi, R.P. (2004), "The adaptive consequences of pride in personal selling", *Journal of the Academy of Marketing Science*, Vol. 32, pp. 386-402.
- Walker, R.M., Brewer, G.A., Lee, M.J., Petrovsky, N. and van Witteloostuijn, A. (2019), "Best practice recommendations for replicating experiments in public administration", *Journal of Public Administration Research and Theory*, Vol. 29 No. 4, pp. 609-626, doi: 10.1093/jopart/muy047.
- Waller, B.D. and Jubran, A.M. (2012), "The impact of agent experience on the real estate transaction", *Journal of Housing Research*, Vol. 21 No. 1, pp. 67-82.
- Weitz, B.A. and Bradford, K.D. (1999), "Personal selling and sales management: a relationship marketing perspective", *Journal of the Academy of Marketing Science*, Vol. 27 No. 2, pp. 241-254, doi: 10.1177/0092070399272008.
- Winkler, D.T. and Hughen, W.K. (2012), "Fringe benefits compensation of real estate agents and brokers", *International Real Estate Review*, Vol. 15 No. 3, pp. 253-328.
- Zumpano, L.V., Johnson, K.H. and Anderson, R.I. (2009), "Determinants of real estate agent compensation choice", *Journal of Housing Research*, Vol. 18 No. 2, pp. 195-207.

Appendix 1

 \overline{A} five-point Likert scale was used, where (1) corresponds to "totally disagree" and (5) to "totally agree" in parts 2 and 4.

Real estate brokers and intrinsic rewards

Part 1

1-I am: 18-23, 24-39, 30-35, 36-41, 42-47, 48-53, 54-59, 60-65, 66+ years old, 2-I define myself as a woman, man, do not want to state.

109

Part 2

SIR

1-I understand the intrinsic rewards the organization offers, 2-The organizations intrinsic reward system promotes commitment, 3-The reward system recognizes superior performance, 4-My achievements give me the zeal to stay in this organization, 5-My achievements are recognized, 6-The responsibilities I have motivate me to remain, 7-The responsibilities I am given fit my qualifications, 8-My efforts are acknowledged in this organization, 9-I am proud of my work in this organization, 10-I am satisfied with the organization's reward policy.

SER

1-I am satisfied with my pay, 2-I am satisfied with the working conditions, 3-B enefits provided by the organization are satisfactory, 4-I am satisfied with the bonuses I get in my job, 5-My organization's pay is benchmarked to the market, 6-My organization's pay is competitive, 7-T he promotion systems of the organization are fair, 8-I am satisfied with the allowance I get at the organization based on my grade, 9-My pay and grade are commensurate with what my colleagues in the same job get, (I am paid for any overtime I work [excluded]).

Part 4

Ioh satisfaction

1 – Generally speaking, I am very satisfied with my job, 2 – Generally speaking, I am very satisfied with the kind of work I have to do on my job, 3 – In my opinion, people with this job are very satisfied with the kind of work they have to do.

Turnover intention

1-I will probably look for a new job in the next year, 2-I will likely actively look for a new job in the next year, 3-I often think about quitting.

Appendix 2

Latent variables	Cronbach's alpha	Composite reliability	AVE	
Job satisfaction	0.789	0.798	0.502	
SER	0.917	0.916	0.549	Table A1.
SIR	0.924	0.925	0.556	Reliability and validity
Turnover intention	0.858	0.859	0.67	measures

JERER 16,1

Appendix 3

110		JobSatisf	SER	SIR	TurnOverInt
Table A2. Correlations between latent variables and square roots of AVE	JobSatisf SER SIR TurnOverInt	0.709 0.777 0.882 -0.68	0.741 0.877 -0.577	0.745 -0.595	0.818

Corresponding author

Martin Ahlenius can be contacted at: martin.ahlenius@hig.se