

# PERCEIVED INCOME ADEQUACY, FAMILY SUPPORT, FINANCIAL ANXIETY, AND TAX NON-COMPLIANCE OF INDONESIAN WORKING WOMEN DURING THE COVID-19 PANDEMIC

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**Abstract.** In high-risk situations like the Covid-19 epidemic, it is believed that perceived income adequacy, family support, financial anxiety, and tax non-compliance have a strong relationship. This study applies the Conservation of Resources (COR) theory in building research models to fill gaps in previous research. According to the COR theory, individuals safeguard the quality and quantity of their financial resources by avoiding threats to their existence, including taxes. Thus, maintaining limited financial resources during the Covid-19 pandemic to meet needs and wants leads to tax avoidance. The cross-sectional data were collected using an online survey and analyzed using the PLS-based SEM technique. Purposive sampling was used to identify 371 Indonesian working women for the study sample. The study's findings confirmed that perceived income adequacy for current needs and wants and perceived family support directly impact financial anxiety. However, this study can only demonstrate the direct effect of perceived income adequacy for current wants and tax non-compliance. Financial anxiety has also been proven to mediate the relationship between the three exogenous factors and tax non-compliance. This study can strengthen the concept of COR theory, which has never been used to investigate tax non-compliance behaviour and can be considered by authorities to design tax policies that take gender into account to achieve tax compliance.

**Keywords:** perceived income adequacy, family support, financial anxiety, tax non-compliance, working women, Covid-19, conservation of resources theory.

**JEL Classification:** D91, G41, H26, H31, G50.

## Introduction

Tax non-compliance leads to a decline in state revenue, resulting in inadequate budget allocation for education, health, food security, infrastructure, and technological innovation. In other words, tax non-compliance affects the quantity and quality of government-provided services and public goods (Cowell & Gordon, 1988). These conditions will impede a nation's capacity for sustainable development. In many jurisdictions, tax non-compliance is an unsolved problem, even though governments and academics have spent considerable resources to resolve the issue since the 1970s (Richardson & Sawyer, 2001). Tax non-compliance could be seen from several perspectives, including law enforcement, public finances, a lack of human resources, organizational design, and ethics, or a combination of all these (Andreoni et al., 1998).

Alm et al. (2020) state that to guarantee that people pay taxes, the government must consider a combination of variables that are likely to drive tax non-compliance behaviour. Some tax authorities believe that people would rationally always avoid taxes if doing so is deemed beneficial, disregarding detection and penalties risk costs. In order to increase tax compliance, authorities tend to refer to the economic deterrence model (Allingham & Sandmo, 1972) by implementing severe penalties, high tax rates, and increased audit frequency. In its development, many tax authorities decided to take into concern non-economic factors, such as tax morale and perception, by applying the Social Psychology Model (Webley et al., 1991) or combining economic and non-economic factors based on the Fiscal Psychology Model (Kirchler, 2007).

However, neither tax authorities nor previous studies have explored investigating the factors influencing tax compliance under unpredictable and uncontrolled

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circumstances such as a recession or pandemic. Bikas and Kavaliauskas (2010) and Valášková and Klieštík (2015) found individual cognitive and emotional deviations from rational behaviour during a financial crisis or recession. The Covid-19 pandemic that has hit almost all countries since the beginning of 2020 raises big questions regarding changes in the interaction pattern between taxpayers and tax authorities (Owens, 2020). Does the taxpayer show compulsory behaviour, voluntary behaviour, or non-compliance behaviour? The COVID-19 pandemic poses unprecedented challenges to the economies and lives of many people worldwide. The existence of lockdowns and social distancing policies causes an increased risk of business failure, increased unemployment, and a significant decrease in individual income (OECD, 2020). Governments worldwide have been rapidly developing multifaceted policies to mitigate the harmful effects COVID-19 pandemic on economies, businesses, and individuals. On the other hand, the government must continue to ensure taxpayers continue to pay taxes due to increased state spending in implementing the multifaceted policy.

According to Pandiangan (2005), compliance with tax obligations affects the psychology of society or is called psychotax. Regarding microeconomics, tax is the uncompensated transfer of money (wealth) from the private sector or individuals to the government sector (Soemitro, 1990). For companies, high tax rates can increase the number of jobless people (Zirgulis & Šarapovas, 2017) and reduce the value of equity (Kantšukov & Sander, 2018). Meanwhile, for individuals, taxes will reduce their take-home pay, impacting their limited capacity to purchase, save, and invest. In fact, according to World Bank (2022) survey data, since the beginning of the COVID-19 pandemic, households with or without children in 35 countries have lost more than 50% of their total income. Specifically, women have suffered a disproportionate brunt of the social and economic costs associated with the COVID-19 pandemic (International Labour Organization [ILO] & OECD, 2020). The pandemic Covid-19 of the previous three years has placed women at a high risk of losing their employment and income, as they are more concentrated in sectors that experienced the greatest decline in performance, such as arts and entertainment, retail, lodging, and food services, and other formal sectors. Moreover, given the gender norms and culturally entrenched, working women have to face a heavy workload at home due to the closure of schools and childcare facilities while implementing large-scale restrictions. As a result, women are more likely than males to have mental health issues and financial anxiety. However, since to the lack of a previous study, it is unclear if the financial strain faced by working women during the Covid-19 pandemic can affect their tax compliance behaviour.

The condition in Indonesia has a like trend. According to survey data, women have worked predominantly in wholesale and retail trade, manufacturing, accommodation and restaurants, forestry and fishing, and agriculture during the previous three years (Miranti et al.,

2022). Transportation, accommodations and restaurants, and wholesale and retail trade are among the top three sectors most harmed by the Covid-19 pandemic in 2020, with respective contracts of 15.1%, 10.3%, and 3.7%. This condition resulted in many Indonesian women working in the formal sector losing their jobs at the beginning of the Covid-19 pandemic, as indicated by the unemployment rate increasing from 5.2% in 2019 to 6.5% in 2020. However, in contrast to the dropping male labour-force participation rate (LFPR), female LFPR in Indonesia continued to rise during the Covid-19 pandemic, namely 53.1% (2020), 53.3% (2021), and 54.3% (2022), even higher than before the Covid-19 pandemic in 2019 (51.9%). The increasing LFPR indicates that many women feel anxious about losing income and try to help meet household needs by creating or participating in the informal sector. Limited financial resources during the Covid-19 pandemic are suspected of causing the decline in the performance of personal tax revenues in 2020, which contracted by 52.23%. Even in the second quarter of 2021, personal income tax receipts were recorded as minus 63.7%. Although there is no data based on gender, tax compliance in 2020 for individual employees and non-employees only reached 85.41% and 52.44%, respectively (Directorate General of Taxes [DGT], 2020).

This study seeks to close the gap from prior research that focuses more on the formulation, implications, and measurement of the effectiveness of tax policies during the Covid-19 pandemic (Avi-Yonah, 2020; Bizioli & Beretta, 2020; Collier et al., 2020; Sadiq & Krever, 2021; Zulkarnaen et al., 2020). This study aims to analyze in depth how perceived income adequacy and perceived family support affect financial anxiety and the decision to comply with taxes or not by working women during the Covid-19 pandemic based on the Conservation of Resources (COR) theory. The variables were chosen based on Katona's (1975) study, which indicates that psychological concepts such as perceptions, attitudes, values, optimism, pessimism, and satisfaction are critical to shaping behaviour. Katona (1975) proposed a basic schema of psychological analysis, namely: stimulus – intervention variable – response (Overt behaviour). Individuals may have different perceptions and evaluations of stimuli and react based on the stimuli they perceive and evaluate.

This study did not analyze the income level variable in connection to financial anxiety (Ismail et al., 2021; Munir et al., 2019; Dasgupta & Dubey, 2015) and tax compliance (Peng, 2022; Durham et al., 2014; McGee, 2012), as many past studies have done. According to several academics, a rise or reduction in income levels cannot adequately represent the degree to which individual needs are fulfilled, or wants are satisfied (Knight & Gunatilaka, 2012; Lee, 2016; Park et al., 2009). Therefore, analyzing the perceived income adequacy variable is important to investigate the psychology of individual decision-making. This study also assumes that social support is related to anxiety and depression during the Covid-19 pandemic, similar to Alnazy et al. (2021), Naderi and Hajjhasani (2021), Oon-Arom

et al. (2021), Shao et al. (2020), Zhang et al. (2020). According to Mariani et al. (2020), social support from family successfully overcame anxieties about financial security due to the lockdown policies that eliminated social and professional interactions. High social support serves as a protective shield for individuals psychologically afflicted by the Covid-19 pandemic (Cao et al., 2020). However, Bruwer et al. (2008) asserted that social support is a complex and multidimensional construct whose explanation is still subject to various interpretations. The complexity of social support is also highlighted by Wang et al. (2012) and Shumaker et al. (2017). They claim that the impact of social support varies depending on the type of support delivered by different parties, such as family, friends, and others. Perceived family support is the specific aspect of social support correlated to financial anxiety in this research. Family support was selected because, at the time of this study, the Indonesian government was still enforcing a policy of lockdowns, which obliged individuals to stay at home for more than two years, and in the overwhelming majority of cases, they lived with a family.

The effect of perceived income adequacy, perceived family support, and financial anxiety on tax non-compliance or similar concepts, such as tax avoidance, tax evasion, tax aggressiveness, tax saving, or tax sheltering, has never been tested. Similarly, researchers have given less attention to the association between perceived family support and financial anxiety (Sears, 2008). The perceived family support variable is more linked to anxiety in the health sector (Garousi et al., 2013; Lee & Kang, 1991; Lekka et al., 2013; Oh, 1991); no study has been conducted to relate it to financial anxiety. Ahamed (2021) and Aslanyan et al. (2021) discovered that financial anxiety had become a serious problem during the Covid-19 pandemic, just as important as the physical and mental health of the community. The COR theory is used in this research to investigate the relationship between the four variables. COR theory has provided a framework for understanding the nature of psychological stress and its potential consequences (Holmgren et al., 2017; Hobfoll & Ford, 2007; Hobfoll & Shirom, 2000).

Based on this background, the research questions for this study are as follows:

1. How does perceived income adequacy affect financial anxiety and tax non-compliance of working women in high-risk situations such as the Covid-19 pandemic based on COR theory?
2. How does social support from family affect financial anxiety and tax non-compliance of working women in high-risk situations such as the Covid-19 pandemic based on COR theory?

This study is anticipated to have both theoretical and practical implications. First, as far as the researcher is concerned, this is the first study to predict tax non-compliance using COR theory. Research on tax non-compliance has often been developed based on the Theory of Reasoned Action, the Theory of Planned Behaviour, and the Slippery Slope Framework, none of which take a loss or

limited resources into account. Therefore, this study can expand the concept of COR theory by demonstrating the consequences of limited financial resources and social support on financial anxiety and tax non-compliance. Second, the study may be a foundation for developing a tax non-compliance research model in high-risk conditions such as pandemics, wars, and economic crises. Thirdly, the study findings may be used by tax authorities in the formulation of effective tax policies by integrating gender into account to achieve cooperative compliance.

## 1. Theoretical framework and hypothesis development

As a motivational theory, COR theory has a basic tenet model that individuals are motivated to maintain, protect the quality and quantity of their current resources (conservation) and build new resources (acquisition) while limiting any circumstances that can endanger resources (Hobfoll, 1989). Resources are defined as: a) those objects (food, clothing, shelter), personal characteristics (self-esteem, social competence, sense of mastery), conditions (marriage, tenure), or energies (money, knowledge, time) that are valued by the individual or b) the means for the attainment of those objects, personal characteristics, conditions, or energies (Hobfoll, 1988; Hobfoll & Ford, 2007; Buchwald & Schwarzer, 2010). COR theory closes the gap from other stress theories, such as the Motivation Theory by Freud (2012), Herzberg (1966) and Maslow (1971), by adopting the view that individuals actively seek to satisfy their needs and pleasures to achieve well-being.

Based on the first principle of COR theory, called the Primacy of Resources Loss, it is more dangerous for individuals when they lose resources than when they receive resource gains. Loss of resources is deemed hazardous due to the difficulty of acquiring and maintaining resources. The opportunity for reduced or lost resources will be even greater when individuals face high-risk situations such as natural disasters, war, crime, terrorism, and disease outbreaks, which can cause psychological stress and distress (Hobfoll & Ford, 2007). This condition is the background for researchers to examine research variables in the Covid-19 pandemic setting.

Financial, income, and money are the resources most often mentioned in a comprehensive set of 74 resources that are considered important by westerners, including adequate financial credit, financial assets (stocks, property), financial stability, retirement security, money for advancement or self-improvement (education, starting a business), savings or emergency money, and adequate income (Hobfoll, 2004, 2001a). This comprehensive set of resources emphasizes that COR theory differs from the perspective of psychodynamic experts, who emphasize that psychological distress is a product of profound personality disorders (Hobfoll, 1989) and individual judgments about events (Hobfoll & Ford, 2007). COR theory states that psychological stress is a reaction to an environment in which there is: a) threat of net loss of resources,

b) net loss of resources, or c) lack of resource acquisition after resource investment. Therefore, actual and perceived losses or minimal gains after significant resource investments can trigger stress (Hobfoll, 2001a, 1989).

This concept is linear with data from the World Bank (2002) and ILO and OECD (2020), which show that during Covid-19, many individuals in the world, especially women, lost their jobs and reduced their income which forced them to have financial anxiety and depression (Banford Witting et al., 2022; Thayer & Gildner, 2021; Hertz-Palmor et al., 2021; Choi et al., 2020). The concept of COR theory also supports the hypothesis that perceived income adequacy could encourage individuals in financial anxiety. However, the effect of perceived income adequacy on financial anxiety still needs to be tested for consistency. Grable et al. (2013) stated that individuals are not smart enough to match their objective income status with subjective perceptions of adequacy, so they are often biased.

A perceived income adequacy is a tool for individuals to subjectively evaluate the adequacy of their income to meet household needs (Grable et al., 2013). In other words, perceived income adequacy refers to individual subjective income (Litwin & Sapir, 2009). Perceived income adequacy represents the perceived stressor and reflects the cognitive evaluation of the individual's financial situation, particularly regarding the ability to fulfil needs and wants. Whelan (1992) asserts that there are two types of deprivation, namely: 1) primary deprivation, which is defined as the individual's inability to buy things that are considered necessary by society, and 2) secondary deprivation or lifestyle deprivation, which refers to the inability of individuals to buy things they want but are considered unnecessary by society. Whelan (1992) claims that measuring these two dimensions is crucial because they lead to the experience of financial stress and psychological stress. This is identical to the study by Sears (2008), which divides perceived income adequacy into a two-dimensional content domain. The domain distinguishes perceptions of basic needs (housing, food, clothes) and perceptions of lifestyle. Furthermore, Sears (2008) distinguishes current perceptions from future-oriented expectations, but this study only measures current perceptions.

In addition to highlighting the significance of resources in stress prediction, COR theory also emphasizes the significant role of social support (Hobfoll, 2001b). This view is based on the fact that individuals have limited resources, especially in high-risk and stressful situations. When individuals realize their resources are inadequate, they will rely on others to obtain resources they do not have, strengthen their diminishing resources, or get them out of a stressful situation. With this strategy, they can regain resources or the ability to use their resources. Resources obtained from other people can be in the form of object resources (such as shelter, food, or transportation) and energy resources (such as money or information). In addition, it can also be in the form of strengthening personal resources that have been depleted by stressful conditions. For example, losing a job can jeopardize an individual's optimism, hope, and

confidence. Emotional support can play a role in replenishing these diminished resources by showing individuals that they are important and loved.

Social support can be delivered through family, friends, community, social networks, or interpersonal relationships (Cullen, 1994). This study includes the perceived family support variable into the model because of the consideration that working women spent more time with their families due to the work-from-home policy during the Covid-19 pandemic. Many previous studies have proven the effect of perceived family support on anxiety levels (Largani et al., 2022; Jafari & Shahriari, 2021; Koutsimani & Montgomery, 2021). However, COR Theory warns of potential social costs (Hobfoll, 2001b). First, individuals must expend other resources for assistance. Reaching out to others takes a lot of effort, time, and income which may already be taxed during stressful conditions. Asking for help can also force the individual to admit shortcomings they don't want others to know about. In certain cultures, the concept of "standing on one's own two feet" has a central value, so asking for help can reduce feelings of mastery and self-esteem. Second, the resources that others offer may be of poor quality, for example, when others offer support but imply that they are superior. Third, asking for social support means incurring costly social obligations in the future because individuals need to repay the kindness given to them. Hence, they have to risk valuable resources at the wrong time.

This study does not use the concept of financial stress but financial anxiety. Financial stress and financial anxiety are individual subjective feelings triggered by a stressor or the accumulation of cognitive appraisal, an individual's behaviour in response to it, environmental threat, and physiological arousal. Although they generally have the same concept and seem like they can be used interchangeably (Bystritsky & Kronemyer, 2014), financial stress and financial anxiety are two different things. Alvarado (2021) and Kim et al. (2020) clearly distinguish financial stress and anxiety definitions and examine them separately. In contrast to financial stress, which refers to a condition of emotional stress caused by real financial difficulties, financial anxiety is the fear that something will go wrong despite having a good financial condition. Archuleta et al. (2013) state that financial stress is a direct reaction to financial stressors, while financial anxiety describes feelings of anxiety or worry about current and future financial situations. Santacroce et al. (2020) explain that individuals who experience high levels of financial stress, which tend to increase over time, will experience depression. Therefore, individuals who experience financial anxiety will show poor financial behaviour, such as not doing financial planning (Grable et al., 2015), budgeting, and saving (Roll et al., 2016). Another difference, financial stress tends to be short-term and is a response to a recognized threat, while financial anxiety can linger, and there seems to be no trigger.

These arguments are in line with the results of the FINRA Foundation study in 2018, which reported that a total of 56% of respondents experienced financial anxiety,

where financial anxiety was consistently higher by approximately 10% than financial stress in various demographic groups (gender, age group, income level, retirement status, number of family dependents, and health problems) (Lin et al., 2019). This figure increased when a re-survey was conducted in 2021 during the Covid-19 pandemic. Data shows that respondents who reported experiencing financial anxiety were higher than those suffering from financial stress, as much as 60%. Meanwhile, when viewed by gender, the results of the 2018 and 2021 studies show that women (2018: 48%, 2021: 65%) have more indications of financial anxiety than men (2018: 37%, 2021: 54%) (Hassler et al., 2021). Meanwhile, Hobfoll (2014) states that working women have a level of anxiety twice as high as men, so they need counselling, emotional support, and instrumental support.

Although no research has tested the effect of perceived income adequacy, perceived family support, and financial anxiety on tax non-compliance, COR theory can underlie the assumption of a relationship between the four variables. As explained earlier, COR theory assumes that individuals will try to protect their resources and obtain new ones by maximizing their resources. This theory is similar to Allingham and Sandmo's (1972) view that taxpayers are rational agents who try to maximize the utility of their taxable income. Taxpayers will rationally weigh the benefits and costs of compliance against the expected evasion utility. Taxpayers will choose an aggressive strategy to avoid some or all of their tax obligations if they see a small audit opportunity. However, if the opportunity to be audited is wide, choosing to comply is a better strategy because fines or tax sanctions will reduce income more than the tax that should be paid honestly (Kirchler et al., 2010). Tax avoidance strategies will also be taken when individuals feel taxes reduce their ability to meet basic needs (Bird & Zolt, 2008), invest and save (Nguyen & Darsono, 2022). Thus, when individuals feel that their income is inadequate after deducting taxes to meet basic needs and lifestyles, it will increase financial anxiety.

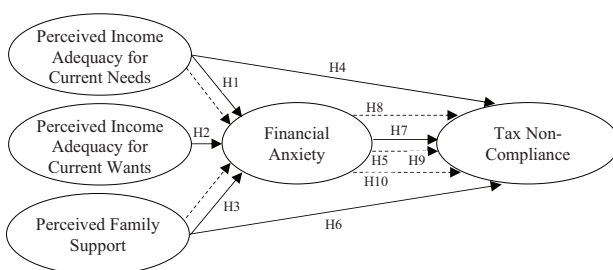


Figure 1. Research model

Based on the constructed theoretical framework, Figure 1 presents the research model, and ten hypotheses are proposed:

H1: Perceived income adequacy for current needs affects the financial anxiety of working women during the Covid-19 pandemic.

H2: Perceived income adequacy for current wants affects the financial anxiety of working women during the Covid-19 pandemic.

H3: Perceived family support affects the financial anxiety of working women during the Covid-19 pandemic.

H4: Perceived income adequacy for current needs affects the tax non-compliance of working women during the Covid-19 pandemic.

H5: Perceived income adequacy for current wants affects tax non-compliance of working women during the Covid-19 pandemic.

H6: Perceived family support affects women's tax non-compliance during the Covid-19 pandemic.

H7: Financial anxiety affects women's tax non-compliance during the Covid-19 pandemic.

H8: Perceived income adequacy for current needs affects the tax non-compliance of working women during the Covid-19 pandemic, with financial anxiety as a mediating variable.

H9: Perceived income adequacy for current wants indirectly affects tax non-compliance for working women during the Covid-19 pandemic, with financial anxiety as a mediating variable.

H10: Perceived family support indirectly affects tax non-compliance for working women during the Covid-19 pandemic, with financial anxiety as a mediating variable.

## 2. Research methodology

Quantitative research with an explanatory approach is applied in this study to test the ten hypotheses proposed. Based on the data collection method, this study is survey research that employs a questionnaire to collect data. The questionnaires were distributed for two months online through social media such as WhatsApp, Facebook, Telegram, or Twitter. The online questionnaire was distributed due to the social distancing policy during the Covid-19 pandemic. In addition, using online surveys gives benefits, including 1) eliminating unanswered questions so that all 371 gathered questionnaires can be processed and 2) meeting the representation of the targeted 34 provinces in Indonesia. The questionnaire format is divided into two parts. The first part explores the characteristics of respondents and their financial condition during the Covid-19 pandemic. Meanwhile, the second section consists of question items about four study variables. The variables and items of the study question were measured using a Likert scale ranging from 1 to 5, with one indicating "strongly disagree", and five indicating "strongly agree". This study has four exogenous variables and one endogenous variable. Question items for three exogenous variables, namely perceived income adequacy for current needs, perceived income adequacy for current wants, and financial anxiety adopted from the Sears study (2008). Meanwhile, the question item for the perceived family support variable

refers to the research of Uddin and Bhuiyan (2019), Kom-jakraphan et al. (2009), and Kyzar et al. (2012). The study's endogenous variable is tax non-compliance, with the question item adapted from Kasipillai and Abdul-Jabbar (2006) and Aregbesola et al. (2020). This research focuses on intentional non-compliance, which refers to having the planned intent to commit tax fraud. Question items were adjusted as well to suit Indonesian conditions and policies. Data processing technique using SEM method based on Partial Least Square (PLS). PLS is recommended for predicting research models with the addition of theory development (Fornell & Bookstein, 1982). Indonesian working women were selected as the population of research. Due to the sizeable and unknown population, the sample size for this research was determined using the Cochran method (Cochran, 1977). Purposive sampling with the following criteria is utilized as the sampling technique: 1) Indonesian women who worked in the formal and informal sectors and 2) have worked for at least a year at the time this study was undertaken.

### 3. Result

#### 3.1. Respondent characteristics

COR theory argues that resources are not individually determined but are the product of a particular culture and

Table 1. Respondent characteristics

Variables	Groups	Frequencies	Percentage (%)
Age	18–30	186	50.13
	31–40	129	34.77
	41–50	43	11.59
	51–60	13	3.50
Marital status	Not yet married	189	50.94
	Marry	156	42.05
	Divorce	26	7.01
Job-status	I and my partner both work	118	75.64
	Only I am working	38	24.36
Type of jobs	Freelancer	64	17.25
	Have own business and employ other people	31	8.36
	Have own business, but do not employ other people	43	11.59
	Government employees	73	19.68
	Private company employee	117	31.54
	Part-time worker	43	11.59
Length of work experience	1–5 years	192	51.75
	5–10 years	112	30.19
	10–20 years	50	13.48
	>20 years	17	4.58
Origin	Sumatra	82	22.10
	Java	209	56.33
	Kalimanta	33	8.89
	Sulawesi	20	5.39
	Nusa Tenggara & Bali	20	5.39
	Maluku & Papua	7	1.89

transcultural Hobfoll (2001a). Therefore, a deep understanding of the respondent's background might strengthen the study's hypothesis analysis. Table 1 shows that most respondents are between the ages of 18 and 30 (50.13 percent), whereas few are between the ages of 51 and 60 (3.50 percent). Among the 156 (42.05 percent) married working women, 38 (24.36 percent) said that they are the only breadwinners and bear the family's living expenses. The majority of respondents, 192 (51.75 percent), had worked for between one and five years. In terms of the type of work, most of them work as employees of private companies, as many as 117 (31.54 percent), civil servants 73 (19.68 percent), and freelancers 64 (17.25 percent). The highest number of respondents, 209 (56.33 percent), came from Java island, followed by the island of Sumatra, with 82 respondents (22.10 percent). Maluku and Papua only contributed seven responders (1.89 percent) to the total.

#### 3.2. Respondents' income conditions during the Covid-19 pandemic

Researchers also tried to understand the financial situation of the sampled women workers to determine if their resources during the Covid-19 epidemic had grown or decreased, causing financial anxiety and changes in tax compliance behaviour. According to Table 2, the monthly income received is quite low, with 102 respondents (27.49 percent) respectively reporting an income of less than Rp. 2,500,000 (USD 169) and between Rp. 2,500,000 – Rp. 5,000,000 (From USD 169 to USD 338). Although 148 respondents (39.89 percent) claimed that their income had not changed throughout the Covid-19 pandemic, as many as 88 respondents (23.72 percent) stated that their income had decreased by 10% to 25%. In addition, 58 respondents (15.63 percent) indicated that their income had decreased by 50%, while 24 respondents (6.47 percent) stated that their income had dropped by 100%. Interestingly, up to 53 respondents (14.29 percent) reported a rise in income. Increased income indicates that the Covid-19 pandemic does not always deplete or annihilate individual resources. With a limited income, 155 respondents (41.78 percent) have a dependent family of two people, while 113 (30.46 percent) have a dependent family of one person. During the Covid-19 pandemic, the highest expense was for the purchase of food (39.35 percent), utility costs (18.33 percent), housing procurement (15.09 percent), and health costs (11.32 percent).

#### 3.3. Assessment of measurement model

Table 3 indicates that the cross loading ranges from 0.700 to 0.905, which is greater than the minimum threshold value of 0.7 (Carrión et al., 2017). As a result, the research indicators meet discriminant validity. The construct reliability test was likewise passed, with minimum values of Composite Reliability and Cronbach Alpha obtained that were 0.953 and 0.945, respectively, above the minimal 0.7. The Average Variance Extracted (AVE) value for the five

Table 2. Respondents' income conditions during the Covid-19 pandemic

Variables	Groups	Frequencies	Percentage (%)
Total Income	< Rp 2.500.000	102	27.49
	Rp 2.500.000 – Rp 5.000.000	102	27.49
	Rp 5.000.000 – Rp 10.000.000	77	20.75
	Rp 10.000.000 – Rp 20.000.00	65	17.52
	> Rp 20.000.000	25	6.74
Income Status	Income has increased	53	14.29
	Income does not change.	148	39.89
	Income reduced by about 10–25%	88	23.72
	Income reduced by about 50%	58	15.63
	Income reduced by up to 100%	24	6.47
The number of dependents family	0	74	19.95
	1	113	30.46
	2	155	41.78
	3	24	6.47
	4	3	0.81
	>4	2	0.54
Income Allocation	Insurance costs	12	3.23
	Entertainment / Recreation costs	11	2.96
	Health Costs	42	11.32
	Education Costs	29	7.82
	Utility Costs (electricity, water, telephone, internet)	68	18.33
	Food Purchase	146	39.35
	Clothing Purchase	7	1.89
	Housing Procurement (house rental, home purchase instalments)	56	15.09

constructs is more than 0.5, which is in the range of 0.642 to 0.721, indicating that convergent validity is accepted as the criteria by Hair et al. (2019).

### 3.4. Assessment of structural model

The structural model is tested by looking at the R-square value, which is a goodness-of-fit test of the

model. The R-square value for the variable of financial anxiety is 0.658, as seen in Table 4. This value indicates that the perceived income adequacy for current needs, perceived income adequacy for current wants, and perceived family support affect financial anxiety by 65.8%, whereas the remaining 34.2% is influenced by other variables not analyzed. Meanwhile, the tax non-compliance variable has an R-squared value of 0.118.

Table 3. Construct reliability and validity analysis

Construct	Items	Loading	CA	CR	AVE
Perceived Income Adequacy for Current Needs (X1)	X1.1 I can afford the health care I need during the Covid-19 pandemic	0.850	0.945	0.953	0.648
	X1.2 I do not need to borrow money in order to pay my bills during the Covid-19 pandemic	0.857			
	X1.3 I cannot pay my bills on time during the Covid-19 pandemic (R)	0.763			
	X1.4 I can afford to pay my utilities (heat, water, gas, etc) during the Covid-19 pandemic	0.875			
	X1.5 I can afford the child care or elder care my family needs during the Covid-19 pandemic	0.700			
	X1.6 I am able to pay my expenses without overdrawing my bank account during the Covid-19 pandemic	0.813			
	X1.7 I cannot pay for the clothes I need during the Covid-19 pandemic (R)	0.841			
	X1.8 I cannot afford the basic transportation I need during the Covid-19 pandemic (R)	0.792			
	X1.9 I can afford the basic housing (e.g. rent, mortgage) I need to survive during the Covid-19 pandemic	0.756			
	X1.10 I cannot afford the food I need to survive during the Covid-19 pandemic (R)	0.787			
	X1.11 I can afford the insurance I need during the Covid-19 pandemic	0.799			
Perceived Family Support (X2)	X2.1 I cannot pay for the clothes I want during the Covid-19 pandemic (R)	0.868	0.945	0.953	0.648
	X2.2 I cannot afford the kind of transportation I want during the Covid-19 pandemic (R)	0.804			
	X2.3 I can afford the type of housing I want during the Covid-19 pandemic	0.707			
	X2.4 I cannot pay for the type of food I like to eat during the Covid-19 pandemic (R)	0.835			

Continued Table 3

Construct	Items	Loading	CA	CR	AVE	
Perceived Income Adequacy for Current wants (X2)	X2.5	I cannot afford the household items I want during the Covid-19 pandemic (R)	0.848	0.954	0.960	0.665
	X2.6	I cannot afford to replace broken or worn out things during the Covid-19 pandemic (R)	0.873			
	X2.7	I can afford the recreation or entertainment I like during the Covid-19 pandemic	0.830			
	X2.8	I can afford to save as much money as I want to be saving during the Covid-19 pandemic	0.798			
	X2.9	My current income allows me to have the lifestyle I want during the Covid-19 pandemic	0.807			
	X2.10	I have extra money for unexpected expenses during the Covid-19 pandemic	0.791			
	X2.11	I cannot save for retirement at the rate I want to save during the Covid-19 pandemic (R)	0.761			
	X2.12	I can afford to travel where I want during the Covid-19 pandemic	0.850			
Perceived Family Support (X3)	X3.1	My family loves me during the Covid-19 pandemic	0.822	0.979	0.980	0.715
	X3.2	I get respect from my family during the Covid-19 pandemic	0.831			
	X3.3	My family helps me with daily activities during the Covid-19 pandemic	0.834			
	X3.4	My family helps me with religious activities during the Covid-19 pandemic	0.853			
	X3.5	My family gives me useful information during the Covid-19 pandemic	0.858			
	X3.6	My family give me emotional support during the Covid-19 pandemic	0.898			
	X3.7	My family shares important decisions with me during the Covid-19 pandemic	0.880			
	X3.8	My family understands my personal desires during the Covid-19 pandemic	0.838			
	X3.9	My family helps me to participate in social events during the Covid-19 pandemic	0.781			
	X3.10	My family listen to my problems during the Covid-19 pandemic	0.844			
	X3.11	My family helps to solve my problems during the Covid-19 pandemic	0.845			
	X3.12	My family is aware of my health during the Covid-19 pandemic	0.833			
	X3.13	My family helps in my treatment during the Covid-19 pandemic	0.821			
Tax Non-Compliance (Y)	Y1.1	It is all right to occasionally understate certain income during the Covid-19 pandemic if I am generally a law-abiding individual.	0.770	0.954	0.959	0.642
	Y1.2	The probability of being audited is so low that it is worthwhile to understate a little on my taxable income during the Covid-19 pandemic.	0.762			
	Y1.3	It is reasonable to avoid paying taxes on income from investments or commissions that the tax authorities cannot determine during the Covid-19 pandemic.	0.785			
	Y1.4	Income tax rates are just too high, so it is not really cheating when I take advantage of regulatory loopholes to reduce the amount of tax owed during the Covid-19 pandemic.	0.824			
	Y1.5	It is not so wrong to reduce taxable income during the Covid-19 pandemic since it does not really hurt anyone.	0.836			
	Y1.6	Under Withholding Tax System, the employer deducts income tax monthly; hence, it is okay not to declare and pay any more income tax during the Covid-19 pandemic.	0.813			
	Y1.7	It is not so wrong to understate taxable income since the government spends too much on ineffectual projects during the Covid-19 pandemic	0.863			
	Y1.8	As several companies pay no income taxes at all during the Covid-19 pandemic, it is not a big deal if someone like me doesn't pay taxes.	0.846			
	Y1.9	Even though my financial condition is poor during the Covid-19 pandemic, I keep paying my income taxes on time and honestly.	0.774			
	Y1.10	It is not fraudulent to not pay taxes if most of the tax revenue is corrupted by politicians or governmental authorities during the Covid-19 pandemic.	0.798			
	Y1.11	During the Covid-19 pandemic, I would rather save a modest amount of my income than pay taxes.	0.755			
	Y1.12	It is reasonable to avoid paying taxes during the Covid-19 pandemic because the tax system is unfair.	0.809			
	Y1.13	Even if my colleagues, friends, and relatives do not pay taxes during the Covid-19 pandemic, I continue to pay my income taxes on time and correctly.	0.774			



End of Table 3

Construct	Items		Loading	CA	CR	AVE
Financial Anxiety (Z)	Z1.1	I feel calm about my financial situation during the Covid-19 pandemic (R)	0.710	0.951	0.959	0.721
	Z1.2	I feel unhappy because of my financial situation during the Covid-19 pandemic	0.836			
	Z1.3	I feel anxious because of my financial situation during the Covid-19 pandemic	0.851			
	Z1.4	I am easily irritated because of my financial situation during the Covid-19 pandemic	0.867			
	Z1.5	My financial situation interferes with my daily job performance during the Covid-19 pandemic	0.892			
	Z1.6	My financial situation frequently interferes with my family relationship during the Covid-19 pandemic	0.847			
	Z1.7	My heartbeat increased because of my financial situation during the Covid-19 pandemic	0.873			
	Z1.8	I have more sweat because of my financial situation during the Covid-19 pandemic	0.870			
	Z1.9	I have fatigued frequently because of my financial situation during the Covid-19 pandemic	0.880			

Note: CA: Cronbach's Alpha; CR: Composite Reliability.

Thus, tax non-compliance is influenced by variables perceived income adequacy for current needs, perceived income adequacy for current wants, perceived family support, and financial anxiety by 11.8 percent. Q-Square Predictive Relevance is also applied to measure how accurately the model and its parameter estimates generate the conservation value. The Q-Square value is equivalent to the coefficient of total determination in path analysis. Q-Square has a value with a range of  $0 < Q^2 < 1$ , where the closer to 1 means the better model. According to the calculated data, it is known that the Q-Square value is 0.6984.

Table 4. Result of R2 and predictive relevance

Endogenous Latent Construct	R <sup>2</sup>	Q <sup>2</sup>
Financial Anxiety (Z)	0.658	0.6984
Tax Non-Compliance (Y)	0.118	

### 3.5. Hypothesis testing

As shown in Table 5, only H4 and H5 were rejected, whereas the other eight hypotheses offered in this research were supported, as shown in Table 5. The acceptance of the eight hypotheses is indicated by t-statistics values greater than 1.946 and p-values less than 0.5. The results of the hypothesis test show that H1, H2, and H3 are accepted as indicated by the value of:  $\beta$ : -0.474, t-statistic: 7.067, p-values: 0.000 for H1,  $\beta$ : -0.276, t-statistic: 4.270, p-values: 0.000 for H2, and  $\beta$ : -0.156, t-statistic: 3.459, p-values: 0.001 for H3. Therefore, perceived income adequacy for current needs, perceived income adequacy for current wants, and perceived family support directly affect financial anxiety. Meanwhile, perceived income adequacy for current needs and perceived family support do not affect tax non-compliance as indicated by the value of  $\beta$ : -0.045, t-statistic: 0.550, p-values: 0.583 for H4 and  $\beta$ : 0.039, t-statistics: 0.492, p-values: 0.623 for H6. However, the perceived income adequacy for current wants is

proven to have a direct effect on tax non-compliance. In other words, H5 is accepted with a value of  $\beta$ : 0.202, t-statistic: 2,400, p-values: 0.017. H7, which states that financial anxiety has a direct influence on tax non-compliance, is also proven by the value of  $\beta$ : 0.449, t-statistic: 5.783, p-values: 0.000. The mediating effect of financial anxiety was also detected on the effect of perceived income adequacy for current needs, perceived income adequacy for current wants, and perceived family support on tax non-compliance, indicated by the value of  $\beta$ : -0.213, t-statistic: 4.436, and p-values: 0.000 for H8. Meanwhile, the acceptance of H9 and H10 is indicated respectively by the value of  $\beta$ : -0.124, t-statistic: 3.194, p-values: 0.001 and  $\beta$ : -0.070, t-statistic: 3.122, p-values: 0.002.

Table 5. Hypotheses testing direct and indirect effect

Hypothesis	Path	Path Coefficient ( $\beta$ )	t-statistics	p-values	Decision
H1	X1 -> Z	-0.474	7.067	0.000	Significant
H2	X2 -> Z	-0.276	4.270	0.000	Significant
H3	X3 -> Z	-0.156	3.459	0.001	Significant
H4	X1 -> Y	-0.045	0.550	0.583	Not Significant
H5	X2 -> Y	0.202	2.400	0.017	Significant
H6	X3 -> Y	0.039	0.492	0.623	Not Significant
H7	Z -> Y	0.449	5.783	0.000	Significant
H8	X1 -> Z -> Y	-0.213	4.436	0.000	Significant
H9	X2 -> Z -> Y	-0.124	3.194	0.001	Significant
H10	X3 -> Z -> Y	-0.070	3.122	0.002	Significant

### 4. Discussion

In general, the concept of COR theory is confirmed by the results of the research hypothesis testing. Based on

the perspective of COR theory, money is considered a resource to protect the resources they have during the Covid-19 pandemic, both in quantity and quality, or to obtain new resources through investment (Hobfoll, 1989). Furthermore, perceived income adequacy is an indicator of the existence of the potential for insufficient resources and, theoretically will cause financial anxiety. The majority of working women in the study sample have a limited income, and more than 45% stated that their income decreased between 10% to 100%. The financial constraints experienced by these women workers are proven to encourage them to experience financial anxiety.

Perceived income adequacy refers to how individuals subjectively evaluate the adequacy of their income to meet the basic needs of life (perceived income adequacy for current needs) and buy the things they want to maintain a lifestyle (perceived income adequacy for current wants) (Sears, 2008). In this study, both dimensions have the same level of preference for stimulating financial anxiety. This result contradicts Maslow's (1971) theory, which states that lower-level needs must be met and satisfied before higher-level needs can be satisfied or are sequential. When fundamental needs have been met, they will cease to exist. Consequently, individual efforts will be geared toward meeting the subsequent set of unfulfilled needs. The activity will develop into a habit, and unfulfilled needs will become the primary or even most essential needs. The desire to meet these needs will become stronger when the individual is increasingly engaged in it.

Individual social activities have been restricted by the Covid-19 pandemic owing to long-term lockdown and work-from-home regulations. Gender norms and entrenched cultural beliefs deteriorated working women's physical and mental health circumstances during the lockdown policy. Because female employees must not only accomplish their professional tasks but also carry a tremendous strain at home owing to the closure of public institutions such as schools, there is great potential to experience physical and mental health problems. Working women in this situation expect to have their primary, secondary, and tertiary needs met simultaneously. This argument is consistent with previously presented data on the financial condition of respondents during the Covid-19 pandemic, in which respondents claimed that their biggest expenses were not only food and housing but also internet, health, entertainment, and insurance. As a result, when working women believe that their income is insufficient to support their needs and wants during the Covid-19 pandemic, they will be forced to experience financial anxiety.

In addition, this study proved that perceived family support affected the financial anxiety of working women during the Covid-19 pandemic. That is, family support in the form of financial and non-financial such as emotional support, concern for health conditions, and a sense of affection can eliminate the negative impact of financial pressure on financial anxiety. These results follow the views of Hobfoll (2014), who states that working women

experience anxiety twice as much as men, so they need advice, emotional support, and instrumental support. The results of this study also ignore the concept of cost in social support based on the COR Theory as stated (Hobfoll, 2001b). Compared to friends or the community, family is considered the closest person who will assist quickly and without expecting reciprocity during the Covid-19 pandemic.

Regarding tax non-compliance, this study can only prove the direct influence of the perceived income adequacy variable for current wants. In contrast with the results of testing the effect of perceived income adequacy for current needs, perceived income adequacy for current wants, and perceived family support on financial anxiety, which shows the same preference between needs and wants. Testing the effect of these three variables on tax non-compliance places insufficient income to fulfil wants during the Covid-19 pandemic as the main consideration. Taxes have the potential to deplete an individual's financial resources. Consequently, individuals have a diminished capacity to manage or create new resources. Working women had acclimated well to these conditions before the Covid-19 outbreak, assuming there was no change in their needs and wants, so they would voluntarily complete their tax obligations. In addition, the existence of fines and interest penalties is a consideration for working women to comply with taxes because sanctions will further reduce take-home pay which taxes have already deducted.

The nature of taxes that are imposed personally with inherent sanctions makes working women not need social support from their families to fulfill their tax obligations. Whether they have family support or not, working women must meet their tax obligations. However, working women evaluate tax non-compliance differently when confronted with their list of wants. During the Covid-19 pandemic, working women not only had a significant need but also an increased wants for items that might reduce their stress and anxiety levels under uncertain situations, such as entertainment and internet access to get information or public services. The motivation to fulfill their wants and the fact that most of them experience a decrease in income but are still required to pay taxes is what triggers tax non-compliance.

Financial anxiety has also been shown to have a direct effect and act as a mediation on the relationship between perceived income adequacy for current needs, perceived income adequacy for current wants, and perceived family on tax non-compliance. Being disobedient in fulfilling their tax obligations is considered a strategy to protect limited resources during the Covid-19 pandemic. Tax non-compliance is also a strategy of working women to maximize their financial resources in meeting their needs and wants during the Covid-19 pandemic. Thus, working women who perceive that their income is insufficient and feel that they do not have family support will experience financial anxiety and push them to be non-compliant with taxes.

## Conclusions, limitations, and future research

This study examines the direct and indirect effects of perceived income adequacy for current needs, perceived income adequacy for current wants, perceived family support, and financial anxiety variables on tax non-compliance. Overall this research supports the COR theory. Working women evaluate the adequacy of their income during the Covid-19 pandemic under two conditions. First, with a steady income, they have to meet needs and wants that are increasing in number. Second, working women suffer from a decreased income while their needs and wants increase. Negative evaluation by respondents is evidenced by the influence of perceived income adequacy for current needs, perceived income adequacy for current wants, and perceived family support on financial anxiety. Different evaluations are shown when the three variables are tested for their effect on tax non-compliance, where only perceived income adequacy for current wants affects tax non-compliance. This result shows that working women have different preferences for their needs and desires when they are used as facts that trigger financial stress or drive tax non-compliance in risky conditions such as the Covid-19 pandemic. However, working women agree that financial anxiety is a strong predictor and mediator for tax non-compliance.

Apart from the research contributions made, this study has some limitations. First, this study does not consider the adequacy of income to meet needs as a predictor of income adequacy to fulfil wants as the concept of Maslow's Motivation Theory. The theory states that satisfying a need is a more basic goal than obtaining a want. Understanding preferences for fulfilling needs and wants will deepen the analysis of how financial anxiety is formed from evaluating financial adequacy by individuals in risky conditions such as the Covid-19 pandemic. Therefore, future research is suggested to examine the effect of perceived income adequacy for current needs on perceived income adequacy for current wants before testing its impact on financial anxiety and tax non-compliance.

Second, this study does not explain the distinction between collectivist and individualist cultures since it focuses on the gender and employment status of the respondents, specifically working women. In other words, in this research, individual perspectives are assumed to represent the culture of the general community. This study was performed in Indonesia, a developing country whose inhabitants adhere to eastern culture; hence, it may provide different findings when examined in developed nations or nations with different cultures. According to COR theory, resources are valued across cultures. However, some resources may exist in certain cultures but are not adopted by others. In addition, the level and order of importance of resources also vary based on different cultural values. Further research can be carried out at different locations or research objects to improve understanding. Thirdly, since this research used cross-sectional data, it cannot discover changes in perception or behaviour regarding financial

adequacy, financial anxiety, and tax non-compliance. Individual behaviour can quickly change when there is influence from the external and internal environment. Therefore, future research can extend the observation period.

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## References

- Ahamed, A. F. M. (2021). COVID-19 induced financial anxiety and subjective well-being among the Bangladeshi middle class: The effects of demographic conditions. *International Journal of Happiness and Development*, 7(2), 142–158. <https://doi.org/10.1504/IJHD.2022.124893>
- Allingham, M. G., & Sandmo, A. (1972). Income tax evasion: A theoretical analysis. *Journal of Public Economics*, 1(3–4), 323–328. [https://doi.org/10.1016/0047-2727\(72\)90010-2](https://doi.org/10.1016/0047-2727(72)90010-2)
- Alm, J., Blaufus, K., Fochmann, M., Kirchler, E., Mohr, P., Olson, N. E., & Torgler, B. (2020). *Tax policy measures to combat the SARS-CoV-2 pandemic and considerations to improve tax compliance: A behavioral perspective* (WU International Taxation Research Paper Series No. 2020-10). SSRN. <https://doi.org/10.2139/ssrn.3692370>
- Alnazly, E., Khraisat, O. M., Al-Bashaireh, A. M., & Bryant, C. L. (2021). Anxiety, depression, stress, fear and social support during COVID-19 pandemic among Jordanian healthcare workers. *Plos One*, 16(3), e0247679. <https://doi.org/10.1371/journal.pone.0247679>
- Alvarado, P. A. L. (2021). *Factors associated with financial stressors, financial stress, and financial behaviors* [Doctoral dissertation]. Utah State University, Logan.
- Andreoni, J., Erard, B., & Feinstein, J. (1998). Tax compliance. *Journal of Economic Literature*, 36(2), 818–860.
- Archuleta, K. L., Dale, A., & Spann, S. M. (2013). College students and financial distress: Exploring debt, financial satisfaction, and financial anxiety. *Journal of Financial Counseling and Planning*, 24(2), 50–62.
- Aregbesola, O. D., Owosekun, A. O., & Salawu, R. O. (2020). Marital status and educational background as determinants of tax compliance in Nigeria. *International Journal of Research and Innovation in Social Science*, 4(8), 777–783.
- Aslanyan, G., Baghdasaryan, V., & Shakhmuradyan, G. (2021). Armenia's social policy response to COVID-19: Mitigating expectations, financial stress, and anxiety. In *CRC 1342 Covid-19 Social Policy Response Series*, 10. <https://doi.org/10.2139/ssrn.3781590>
- Avi-Yonah, R. S. (2020). COVID-19 and fiscal policies: COVID-19 and US tax policy: What needs to change? *Intertax*, 48(8/9), 790–793. <https://doi.org/10.54648/TAXI2020077>
- Banford Witting, A., Tambling, R., & Hobfoll, S. (2022). Resource loss, gain, and traumatic stress in couples during COVID-19. *Psychological Trauma: Theory, Research, Practice, and Policy*. <https://doi.org/10.1037/tra0001276>
- Bikas, E., & Kavaliauskas, A. (2010). Lithuanian investors' behaviour during financial crisis. *Business: Theory and Practice*, 11(4), 370–380. <https://doi.org/10.3846/btp.2010.40>
- Bird, R. M., & Zolt, E. M. (2008). Tax policy in emerging countries. *Environment and Planning C: Government and Policy*, 26(1), 73–86. <https://doi.org/10.1068/cav3>

- Bizioli, G., & Beretta, G. (2020). COVID-19 and fiscal policies: Italy's tax and fiscal policy measures at the time of the COVID-19 crisis: "Tax Peanuts" without a new deal. *Intertax*, 48(8/9), 761–768. <https://doi.org/10.54648/TAXI2020072>
- Bruwer, B., Emsley, R., Kidd, M., Lochner, C., & Seedat, S. (2008). Psychometric properties of the multidimensional scale of perceived social support in youth. *Comprehensive Psychiatry*, 49(2), 195–201. <https://doi.org/10.1016/j.comppsy.2007.09.002>
- Buchwald, P., & Schwarzer, C. (2010). Impact of assessment on students' test anxiety. In P. Peterson, E. Baker, & T. E. McGaw (Eds.), *International encyclopedia of education* (3<sup>rd</sup> ed., pp. 498–505). Elsevier. <https://doi.org/10.1016/B978-0-08-044894-7.00304-3>
- Bystritsky, A., & Kronemyer, D. (2014). Stress and anxiety: Counterpart elements of the stress/anxiety complex. *Psychiatric Clinics*, 37(4), 489–518. <https://doi.org/10.1016/j.psc.2014.08.002>
- Carrión, G. C., Nitzl, C., & Roldán, J. L. (2017). Mediation analyses in partial least squares structural equation modeling: Guidelines and empirical examples. In H. Latan & R. Noonan (Eds.), *Partial least squares path modelling* (pp. 173–195). Springer. [https://doi.org/10.1007/978-3-319-64069-3\\_8](https://doi.org/10.1007/978-3-319-64069-3_8)
- Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Research*, 287, 112934. <https://doi.org/10.1016/j.psychres.2020.112934>
- Choi, E. P. H., Hui, B. P. H., & Wan, E. Y. F. (2020). Depression and anxiety in Hong Kong during COVID-19. *International Journal of Environmental Research and Public Health*, 17(10), 3740. <https://doi.org/10.3390/ijerph17103740>
- Cochran, W. G. (1977). *Sampling techniques* (3<sup>rd</sup> ed.). John Wiley & Sons.
- Collier, R., Pirlot, A., & Vella, J. (2020). Tax policy and the COVID-19 crisis. *Intertax*, 48(8), 794–804. <https://doi.org/10.54648/TAXI2020078>
- Cowell, F. A., & Gordon, J. P. (1988). Unwillingness to pay: Tax evasion and public good provision. *Journal of Public Economics*, 36(3), 305–321. [https://doi.org/10.1016/0047-2727\(88\)90013-8](https://doi.org/10.1016/0047-2727(88)90013-8)
- Cullen, F. T. (1994). Social support as an organizing concept for criminology: Presidential address to the Academy of Criminal Justice Sciences. *Justice Quarterly*, 11(4), 527–559. <https://doi.org/10.1080/07418829400092421>
- Dasgupta, P., & Dubey, K. (2015). Factors affecting stress level of married working women in dual income family. *Asian Journal of Management*, 6(4), 265–275. <https://doi.org/10.5958/2321-5763.2015.00039.6>
- Directorate General of Taxes. (2020). *Annual report 2020: Constantly optimizing opportunities amid challenging times*. DGT. <https://www.pajak.go.id/sites/default/files/2021-11/Laporan%20Tahunan%20DJP%202020%20-%20English.pdf>
- Durham, Y., Manly, T. S., & Ritsema, C. (2014). The effects of income source, context, and income level on tax compliance decisions in a dynamic experiment. *Journal of Economic Psychology*, 40, 220–233. <https://doi.org/10.1016/j.joep.2012.09.012>
- Fornell, C., & Bookstein, F. L. (1982). Two structural equation models: LISREL and PLS applied to consumer exit-voice theory. *Journal of Marketing Research*, 19(4), 440–452. <https://doi.org/10.1177/002224378201900406>
- Freud, S. (2012). *The basic writings of Sigmund Freud*. Modern library.
- Garousi, S., Garrusi, B., & Sadat, K. B. (2013). Does perceived family support has a relation with depression and anxiety in an Iranian diabetic sample? *International Journal of Caring Sciences*, 6(3), 360–368.
- Grable, J. E., Cupples, S., Fernatt, F., & Anderson, N. (2013). Evaluating the link between perceived income adequacy and financial satisfaction: A resource deficit hypothesis approach. *Social Indicators Research*, 114(3), 1109–1124. <https://doi.org/10.1007/s11205-012-0192-8>
- Grable, J. E., Joo, S. H., & Park, J. (2015). Exploring the antecedents of financial behavior for Asians and non-Hispanic Whites: The role of financial capability and locus of control. *Journal of Personal Finance*, 14(1), 28–37.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hasler, A., Lusardi, A., & Valdes, O. (2021). *Financial anxiety and stress among US households: New evidence from the national financial capability study and focus groups* (Report). FINRA Investor Education Foundation.
- Hertz-Palmor, N., Moore, T. M., Gothelf, D., DiDomenico, G. E., Dekel, I., Greenberg, D. M., Brown, L. A., Matalon, N., Visoki, E., White, L. K., Himes, M. M., Schwartz-Lifshitz, M., Gross, R., Gur, R. C., Gur, R. E., Pessach, I. M., & Barzilay, R. (2021). Association among income loss, financial strain and depressive symptoms during COVID-19: Evidence from two longitudinal studies. *Journal of Affective Disorders*, 291, 1–8. <https://doi.org/10.1016/j.jad.2021.04.054>
- Herzberg, F. I. (1966). *Work and the nature of man*. Thomas Y. Crowell Co.
- Hobfoll, S. E. (1988). *The ecology of stress*. Taylor & Francis.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524. <https://doi.org/10.1037/0003-066X.44.3.513>
- Hobfoll, S. E. (2001a). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology*, 50(3), 337–421. <https://doi.org/10.1111/1464-0597.00062>
- Hobfoll, S. E. (2001b). Social support and stress. *International Encyclopedia of the Social & Behavioral Sciences*, 14461–14465. <https://doi.org/10.1016/B0-08-043076-7/03823-7>
- Hobfoll, S. E. (2004). *Stress, culture, and community: The psychology and philosophy of stress*. Springer Science & Business Media.
- Hobfoll, S. E. (2014). *Stress, social support, and women*. Taylor & Francis. <https://doi.org/10.4324/9781315803128>
- Hobfoll, S. E., & Ford, J. S. (2007). Conservation of resources theory. In E. Fink (Ed.), *Encyclopedia of stress* (pp. 562–567). Academic Press. <https://doi.org/10.1016/B978-012373947-6.00093-3>
- Hobfoll, S. E., & Shirom, A. (2000). Conservation of resources theory: Applications to stress and management in the workplace. In R. T. Golembiewski (Ed.), *Handbook of organization behavior* (pp. 57–80). Marcel Dekker.
- Holmgren, L., Tirone, V., Gerhart, J., & Hobfoll, S. E. (2017). Conservation of resources theory: Resource caravans and passageways in health contexts. In C. Cooper & J. Quick (Eds.), *The handbook of stress and health: A guide to research and practice* (pp. 443–457). Wiley. <https://doi.org/10.1002/9781118993811.ch27>
- International Labour Organization & OECD. (2020). *The impact of the COVID-19 pandemic on jobs and incomes in G20 economies*. ILO & OECD. [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---cabinet/documents/publication/wcms\\_756331.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---cabinet/documents/publication/wcms_756331.pdf)

- Ismail, R. N. H. R., Hussin, N. Y. C., & Bakar, A. Y. A. (2021). Depression, anxiety and stress level among low-income family during COVID-19 pandemic in Malaysia. *Journal of Legal, Ethical and Regulatory Issues*, 24(1), 1–5.
- Jafari, F., & Shahriari, M. (2021). Effects of lifestyle education on depression, anxiety, stress, and perceived family support among hypertensive patients. *Medical-Surgical Nursing Journal*, 10(3), e122691. <https://doi.org/10.5812/msnj.122691>
- Kantšukov, M., & Sander, P. (2018). A lesson in valuation from Estonia: The difference between the fundamental value of equity under distributed and traditional profit taxation systems. *Business: Theory and Practice*, 19, 146–156. <https://doi.org/10.3846/btp.2018.15>
- Kasipillai, J., & Abdul-Jabbar, H. (2006). Gender and ethnicity differences in tax compliance. *Asian Academy of Management Journal*, 11(2), 73–88.
- Katona, G. (1975). *Psychological economics*. Elsevier.
- Kim, Y. K., Lim, Y., Maleku, A., Kagotho, N., & Yang, M. (2020). Financial stress and depression among African refugees in the southern United States: A serial multiple mediation analysis of financial self-efficacy and financial anxiety. *Journal of Immigrant & Refugee Studies*, 18(2), 151–171. <https://doi.org/10.1080/15562948.2019.1593571>
- Kirchler, E. (2007). *The economic psychology of tax behaviour*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511628238>
- Kirchler, E., Muehlbacher, S., Kastlunger, B., & Wahl, I. (2010). Why pay taxes? A review of tax compliance decisions. In J. Alm, J. Martinez-Vazquez, & B. Torgler (Eds.), *Developing alternative frameworks for explaining tax compliance* (pp. 15–31). Routledge.
- Knight, J., & Gunatilaka, R. (2012). Income, aspirations and the hedonic treadmill in a poor society. *Journal of Economic Behavior & Organization*, 82(1), 67–81. <https://doi.org/10.1016/j.jebo.2011.12.005>
- Komjakraphan, P., Isalamalai, S. A., Boonyasopun, U., & Schneider, J. K. (2009). Development of the Thai family support scale for elderly parents (TFSS-EP). *Pacific Rim International Journal of Nursing Research*, 13(2), 118–132.
- Koutsimani, P., & Montgomery, A. (2021). A two-wave study on the associations of burnout with depression and anxiety: The mediating and moderating role of perceived family support. *Psychological Reports*, 126(1). <https://doi.org/10.1177/00332941211051263>
- Kyzar, K. B., Turnbull, A. P., Summers, J. A., & Gómez, V. A. (2012). The relationship of family support to family outcomes: A synthesis of key findings from research on severe disability. *Research and Practice for Persons with Severe Disabilities*, 37(1), 31–44. <https://doi.org/10.2511/027494812800903247>
- Largani, M. H., Gorgani, F., Abbaszadeh, M., Arbabi, M., Reyhan, S. K., Allameh, S. F., Shahmansouri, N., & Parsa, S. (2022). Depression, anxiety, perceived stress and family support in COVID-19 patients. *Iranian Journal of Psychiatry*, 17(3), 257–264. <https://doi.org/10.18502/ijps.v17i3.9725>
- Lee, D. (2016). An analysis of luxury brand purchasing behavior. *International Journal of Current Research*, 8(11), 41903–41909.
- Lee, M. H., & Kang, H. S. (1991). A study on perceived family support and anxiety in hemiplegic patients. *The Journal of Nurses Academic Society*, 21(1), 50–62. <https://doi.org/10.4040/jnas.1991.21.1.50>
- Lekka, D., Tselebis, A., Bratis, D., Zafeiropoulos, G., Nikoviotis, D., Karkanas, A., Syrigos, K., & Moussas, G. (2013). 1731 – The relationship between pain symptoms, anxiety and perceived family support in lung cancer patients. *European Psychiatry*, 28(Suppl 1). [https://doi.org/10.1016/S0924-9338\(13\)76711-7](https://doi.org/10.1016/S0924-9338(13)76711-7)
- Lin, J. T., Bumcrot, C., Ulicny, T., Mottola, G., Walsh, G., Ganem, R., Kieffer C., & Lusardi, A. (2019). *The state of US financial capability: The 2018 national financial capability study*. FINRA Investor Education Foundation.
- Litwin, H., & Sapir, E. V. (2009). Perceived income adequacy among older adults in 12 countries: Findings from the survey of health, ageing, and retirement in Europe. *The Gerontologist*, 49(3), 397–406. <https://doi.org/10.1093/geront/gnp036>
- Mariani, R., Renzi, A., Di Trani, M., Trabucchi, G., Danskin, K., & Tambelli, R. (2020). The impact of coping strategies and perceived family support on depressive and anxious symptomatology during the coronavirus pandemic (COVID-19) lockdown. *Frontiers in Psychiatry*, 11, 1195. <https://doi.org/10.3389/fpsy.2020.587724>
- Maslow, A. H. (1971). *The farther reaches of human nature*. Viking Press.
- McGee, R. W. (2012). Income level and the ethics of tax evasion. In R. W. McGee (Ed.), *The ethics of tax evasion* (pp. 485–495). Springer. [https://doi.org/10.1007/978-1-4614-1287-8\\_32](https://doi.org/10.1007/978-1-4614-1287-8_32)
- Miranti, R., Sulistyaningrum, E., & Mulyaningsih, T. (2022). Women's roles in the Indonesian economy during the COVID-19 pandemic: Understanding the challenges and opportunities. *Bulletin of Indonesian Economic Studies*, 58(2), 109–139. <https://doi.org/10.1080/00074918.2022.2105681>
- Munir, M. A., Basir-Cyio, M., Sabir, M., & Ali, M. N. (2019). Relationship between income and anxiety on education, health access and the poverty level of rural communities in Sigi Regency, Central Sulawesi. *Indian Journal of Public Health Research & Development*, 10(10). <https://doi.org/10.5958/0976-5506.2019.02900.0>
- Naderi, N., & Hajihasani, M. (2021). Death anxiety in the elderly: The role of spiritual health and perceived social support. *Ageing*, 6(4), 309–319.
- Nguyen, H. T., & Darsono, S. N. A. C. (2022). The impacts of tax revenue and investment on the economic growth in Southeast Asian countries. *Journal of Accounting and Investment*, 23(1), 128–146. <https://doi.org/10.18196/jai.v23i1.13270>
- OECD. (2020). *Tax administration responses to COVID-19: Assisting wider government*. <https://www.oecd.org/coronavirus/policy-responses/tax-administration-responses-to-covid-19-assisting-wider-government-0dc51664/>
- Oh, H. S. (1991). A study on relationship between perceived family support and anxiety of patient on hemodialysis. *Journal of Korean Academy of Adult Nursing*, 3(1), 40–53.
- Oon-Arom, A., Wongpakaran, T., Kuntawong, P., & Wongpakaran, N. (2021). Attachment anxiety, depression, and perceived social support: A moderated mediation model of suicide ideation among the elderly. *International Psychogeriatrics*, 33(2), 169–178. <https://doi.org/10.1017/S104161022000054X>
- Owens, J. (2020, June 9). *Covid-19 and the future of taxation – what role for cooperative compliance?* Bloomberg Tax. <https://news.bloombergtax.com/daily-tax-report-international/insight-covid-19-and-the-future-of-taxation-what-role-for-cooperative-compliance>
- Pandiangan, L. (2005). Penyakit pajak bernama psychotax. *Jurnal Perpajakan*.
- Park, B. H., Jung, M. S., & Lee, T. J. (2009). Associations of income and wealth with health status in the Korean elderly. *Journal of Preventive Medicine and Public Health*, 42(5), 275–282. <https://doi.org/10.3961/jpmph.2009.42.5.275>
- Peng, H. C. (2022). The whistleblowing mechanism and tax evasion: An experimental study with private income-level infor-

- mation. *Applied Economics Letters*, 1–6.  
<https://doi.org/10.1080/13504851.2022.2094318>
- Richardson, M., & Sawyer, A. J. (2001). A taxonomy of the tax compliance literature: Further findings, problems and prospects. *Australian Tax Forum*, 16, 137.
- Roll, S. P., Taylor, S. H., & Grinstein-Weiss, M. (2016). *Financial anxiety in low- and moderate-income households: Findings from the household financial survey* (CSD Research Brief No. 16-42). Washington University. Center for Social Development.
- Sadiq, K., & Krever, R. (2021). Does tax policy fit in the portfolio of COVID-19 responses? *Pacific Accounting Review*, 33(2), 212–220. <https://doi.org/10.1108/PAR-08-2020-0119>
- Santacroce, S. J., Killela, M. K., Kerr, G., Leckey, J. A., & Kneipp, S. M. (2020). Fathers' psychological responses to pediatric cancer-induced financial distress. *Pediatric Blood & Cancer*, 67(6), e28281. <https://doi.org/10.1002/pbc.28281>
- Sears, L. (2008). *Work-related outcomes of financial stress: Relating perceived income adequacy and financial strain to job performance and well-being* [Unpublished Master's Thesis]. Department of Psychology, Portland State University.
- Shao, R., He, P., Ling, B., Tan, L., Xu, L., Hou, Y., Kong, L., & Yang, Y. (2020). Prevalence of depression and anxiety and correlations between depression, anxiety, family functioning, social support and coping styles among Chinese medical students. *BMC Psychology*, 8, 1–19.  
<https://doi.org/10.1186/s40359-020-00402-8>
- Shumaker, S. C., Frazier, S. K., Moser, D. K., & Chung, M. L. (2017). Psychometric properties of the multidimensional scale of perceived social support in patients with heart failure. *Journal of Nursing Measurement*, 25(1), 90–102.  
<https://doi.org/10.1891/1061-3749.25.1.90>
- Soemitro, R. (1990). *Asas dan Dasar Perpajakan*. Jilid 1. Eresco. Bandung.
- Thayer, Z. M., & Gildner, T. E. (2021). COVID-19-related financial stress associated with higher likelihood of depression among pregnant women living in the United States. *American Journal of Human Biology*, 33(3), e23508.  
<https://doi.org/10.1002/ajhb.23508>
- Uddin, M. A., & Bhuiyan, A. J. (2019). Development of the family support scale (FSS) for elderly people. *MOJ Gerontology & Geriatrics*, 4(1), 17–20.  
<https://doi.org/10.15406/mojgg.2019.04.00170>
- Valášková, K., & Klieštík, T. (2015). Behavioural reactions of consumers to economic recession. *Business: Theory and Practice*, 16(3), 290–303. <https://doi.org/10.3846/btp.2015.515>
- Wang, Q., Hay, M., Clarke, D., & Menahem, S. (2012). The prevalence and predictors of anxiety and depression in adolescents with heart disease. *The Journal of Pediatrics*, 161(5), 943–946.  
<https://doi.org/10.1016/j.jpeds.2012.04.010>
- Webley, P., Robben, H., Elffers, H., & Hessing, D. (1991). *Tax evasion. An experimental approach*. Cambridge University Press.
- Whelan, C. T. (1992). The role of income, life-style deprivation and financial strain in mediating the impact of unemployment on psychological distress: Evidence from the Republic of Ireland. *Journal of Occupational and Organizational Psychology*, 65(4), 331–344.  
<https://doi.org/10.1111/j.2044-8325.1992.tb00509.x>
- World Bank. (2022). *The impact of COVID-19 on the welfare of households with children: An overview based on high frequency phone surveys (English)*. Equitable growth, finance and institutions notes. World Bank Group. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099230003092226699/p1776560f3b3cc0eb0b5b50ce9d-88cf44f6>
- Zhang, H., Ye, Z., Tang, L., Zou, P., Du, C., Shao, J., Wang, X., Chen, D., Qiao, G., & Mu, S. Y. (2020). Anxiety symptoms and burnout among Chinese medical staff of intensive care unit: The moderating effect of social support. *BMC Psychiatry*, 20, 1–7. <https://doi.org/10.1186/s12888-020-02603-2>
- Zirgulis, A., & Šarapovas, T. (2017). Impact of corporate taxation on unemployment. *Journal of Business Economics and Management*, 18(3), 412–426.  
<https://doi.org/10.3846/16111699.2016.1278400>
- Zulkarnaen, W., Erfiansyah, E., Syahril, Amin, N. N., & Leonardri, D. G. (2020). Comparative study of tax policy related to COVID-19 in ASEAN countries. *International Journal of TEST Engineering & Management*, 83(2), 6519–6528.