ACADEMIA International Journal for Social Sciences
Volume 4, Issue 3, 2025 ISSN-L (Online): 3006-6638

Work for Rewards: Examining Instrumental Orientation by Marital Status and Job Designation

Muhammad Shahzad
m.shahzad@uog.edu.pk
Lecturer, Department of Sociology, University of Gujrat, Pakistan

Sidra Batool
Technical Librarian, Ayub Agricultural Research Institute, Faisalabad, Pakistan

Muhammad Nadeem Akhtar
ch.nadeem@aari.punjab.gov.pk
Head, Main Library & IT Department, Ayub Agricultural Research Institute, Faisalabad, Pakistan

Corresponding Author: Muhammad Nadeem Akhtar ch.nadeem@aari.punjab.gov.pk

Received: 18-08-2025 **Revised:** 03-09-2025 **Accepted:** 16-09-2025 **Published:** 30-9-2025

ABSTRACT

This study examined differences in instrumental orientation among researchers working in agricultural research institutions in Punjab, Pakistan. Instrumental orientation was conceptualized in terms of the importance attached to high income, opportunities for advancement, and a comprehensive benefits package. Data were collected from 329 researchers through stratified sampling. The measurement properties of the scale were assessed through factor loadings, reliability, convergent validity, and collinearity diagnostics, followed by descriptive and inferential analyses. The three-item scale demonstrated strong psychometric properties. Welch's ANOVA was employed to examine differences in instrumental orientation across marital-status and job-designation groups, while Games–Howell tests were used for pairwise comparisons. Significant differences were found across marital-status groups. Single respondents reported significantly higher instrumental orientation than married and divorced respondents, whereas married and divorced respondents did not differ significantly. Significant differences were also observed across job designations, with Scientific Officers reporting the highest and Principal Scientists the lowest levels. The findings demonstrate that instrumental orientation varies according to researchers' social and organizational positions.

Keywords: *Instrumental orientation, marital status, job designation, Games–Howell tests, researchers*

INTRODUCTION

Work is significant in people's lives and has functions beyond providing for their livelihood (Ros et al., 1999; Waterwall et al., 2023). For many people, work offers a sense of financial security, opportunities to grow, social recognition, and benefits from the organization (Sagie et al., 1996). People also vary in the significance they give these outcomes. Others may value the intrinsic characteristics of their work (e.g., interest, autonomy, achievement, personal fulfilment) more than the tangible rewards that are gained from work. The latter orientation is often referred to as instrumental orientation (Volk & Hadler, 2018).

Instrumental orientation is an orientation towards work that emphasizes work for the benefits it yields (Linando, 2024; Sagie et al., 1996). People with a more instrumental orientation might feel that a job is important, due to the monetary compensation, the potential for advancement, and benefits provided by a job (Baranik et al., 2022; Busque-Carrier et al., 2022; Charles & James, 2003). In this context, the worth of

a job is related to the worth that employees get for their contribution (Crompton & Harris, 1998; Dajani, 2018). Income gives economic security and purchasing power, advancement gives opportunities for occupational mobility and better career position, and benefits gives material and employment security. The dimensions are important for understanding instrumental orientation in formal organizations, especially in the context of the assessment of the work (Dancey, 1992; Furåker et al., 2011).

The importance attached to instrumental rewards may vary according to the social circumstances of employees. People are not employed in a vacuum from their family roles, economic status, and social status (Haller et al., 2023; Harpaz, 1990). The roles and duties that they have in their personal lives may then affect their expectations of their work. One important social status that could be linked to employees' orientations towards work is marital status. Marriage can bring increased responsibilities within the household, financial obligations and expectations for financial security (Harpaz & Snir, 2003; Hirschfeld & Feild, 2000; Hult, 2004). This means that married and unmarried workers can have different priorities when it comes to income, career growth and organizational benefits. But the issue of whether there are such differences is an empirical one which requires to be explored in specific occupational settings.

Another potential source of variation in instrumental orientation may be organizational position (Jonck et al., 2017; Jutz et al., 2018; Kirkpatrick Johnson, 2005). The responsibilities, authority, compensation, recognition, advancement, and access to organizational resources that employees have in their various occupations can vary. In an agricultural research institute, the scientific staff are organized differently with various rank positions like Scientific Officer, Senior Scientist, Principal Scientist corresponding to various levels or stages of scientific responsibilities (Batool et al., 2023; Shahzad et al., 2023; Shahzad, Batool, Anjum, et al., 2024). These differences in organizational position can affect employee perceptions of the rewards of their jobs. Career stage employees can thus have varying priorities for salary, promotion, and compensation (Shahzad, Batool, Anjum, et al., 2024).

The context of agricultural research is especially significant because agricultural researchers work in formally structured and specialized institutions where professional advancement, scientific duties, institutional recognition, and job satisfaction are important aspects of working life (Blackler, 1995; Cortada, 2009; Erickson et al., 2018). Although these factors are crucial, there has been relatively little research on whether researchers' orientations to their instruments differ based on their social and organizational roles (Crompton & Harris, 1998; Dajani, 2018; Dancey, 1992). It is useful to consider these differences if they can help to illuminate the researchers' perception of the material and career aspects of work. Thus, the present study therefore focuses on researchers working in agricultural research institutions in Punjab. The present study examines whether instrumental orientation differs according to marital status and job designation of agricultural researchers of Punjab.

LITERATURE REVIEW

Instrumental Orientation and the Meaning of Work

Work is not only an economic activity; it is also a social relationship, in which people work to achieve different objectives and expectations (Furåker et al., 2011; Haller et al., 2023; Harpaz, 1990). Employees can value work due to the satisfaction they get from doing their work, the opportunities that the work affords them for personal development, the social relationships that they build at work, or the rewards that they receive from their work (Harpaz & Snir, 2003; Hirschfeld & Feild, 2000; Hult, 2004). The various orientations illustrate that not everyone expects to work in the same way (Jutz et al., 2018). Instrumental orientation is one type of employment orientation. It focuses on the results of people's work, not on the satisfaction or meaning of their work. An instrumentally oriented employee might view work as a significant way to earn money, advance in the workplace, gain benefits, and/or accomplish long-term

economic goals (Jonck et al., 2017; Kirkpatrick Johnson, 2005). This is not necessarily a sign of lack of interest in the job or lack of interest in professional success (Kuchinke et al., 2009; Kuchinke et al., 2008; Linando, 2024). Rather, it posits that real and work-based results are significant factors in the worth of work.

For the present study, instrumental orientation is defined as high income, good opportunities for advancement and a comprehensive benefits package (Jutz et al., 2018). These dimensions are three vital aspects of the extrinsic employment reward. Income is the short-term monetary benefit of work. Advancement is an opportunity to move up in an occupation and their income. Benefits are other material and employment-related benefits that come with organizational membership. (Moya et al., 2000; Ros et al., 1999; Sagie et al., 1996; Sinclair et al., 2025) Together, these dimensions provide a focused representation of the instrumental aspects of work.

The attitude of employees towards their work is part of their broader social experiences (Taipale et al., 2011; Volk & Hadler, 2018; Waterwall et al., 2023). The economic importance of work and the types of rewards for work can be shaped by family factors (Littman-Ovadia et al., 2013; Malinowska et al., 2018; Marques et al., 2023; Ng & Feldman, 2014). Marital status is significant because it can affect the type and amount of household duties. The primary concern of an unmarried employee with employment may be his or her own financial requirements and career objectives, while a married employee may consider employment in part to his or her family's financial needs, family security and longer-term obligations (Parry & Taylor, 2007; Roche et al., 2014; Vo et al., 2022). Additionally, when workers are responsible for the well-being of a family, income may be a significant factor. Likewise, benefits of employment can become more important if they help to ensure a family's financial security or afford them some level of financial protection against unforeseen costs (Alcover & Topa, 2018; Gillet et al., 2012; Goštautaitė et al., 2019). Career advancement opportunities can also be significant as they help to enhance future economic situations and offer better occupational stability.

However, marital status is not a determinant of one's work orientation (Lorence & Mortimer, 1985; Marques et al., 2023; Pak et al., 2023). Workers in the same family situation may have different values, and workers in different family situations may have the same expectations of work. The question that has to be asked is whether there are systematic differences among marital-status groups in the agricultural population of researchers. This gives the foundation for the analysis of the first hypothesis:

H1: There are statistically significant differences in instrumental orientation based on marital status.

Instrumental Orientation and Job Designation

The organizational environment provides another important context for understanding employees' work orientations (Baranik et al., 2022; Berglund, 2011; Busque-Carrier et al., 2022). Job designation reflects an employee's position within the organizational hierarchy and may be associated with differences in responsibilities, authority, career progression, remuneration, recognition, and access to organizational resources (Charles & James, 2003; Crompton & Harris, 1998; Dajani, 2018). These differences may influence the extent to which employees value particular employment rewards (Dancey, 1992; Furåker et al., 2011; Haller et al., 2023). Within agricultural research institutions, researchers occupy different professional designations, including positions such as Scientific Officer, Senior Scientist, and Principal Scientist (Batool et al., 2023; Shahzad et al., 2023; Shahzad, Batool, Anjum, et al., 2024; Shahzad, Batool, & Sajid, 2024). These positions may represent different stages of professional development and organizational responsibility. Employees at different levels may consequently have different expectations regarding career advancement and different experiences of organizational rewards. For example, advancement may be particularly salient for employees who are still progressing through the organizational

hierarchy, while employees occupying more senior positions may place greater emphasis on maintaining financial rewards, benefits, professional recognition, or other outcomes associated with their position.

The relationship between job designation and instrumental orientation is therefore theoretically relevant because organizational position can shape employees' experiences and expectations concerning employment rewards (Furåker et al., 2011; Haller et al., 2023; Harpaz, 1990). However, differences should be established empirically rather than assumed solely from differences in designation. Examining researchers across different job-designation groups can reveal whether instrumental orientation varies systematically across organizational positions. Another important context for the understanding of the work orientation of employees is the organizational environment (Berglund, 2011; Busque-Carrier et al., 2022; Dajani, 2018). Job designation is a person's rank in the organizational hierarchy and can be linked to variations in responsibilities, authority, career advancement, compensation, recognition, and access to organizational resources. These differences may influence the extent to which employees value particular employment rewards.

Researchers working in agricultural research institutions have various professional designations, such as Scientific Officer, Senior Scientist and Principal Scientist. These roles can be of various levels in the career and organizational development of the individual (Batool et al., 2023; Shahzad, Batool, Anjum, et al., 2024). This can lead to a variety of expectations among employees about career development and rewards in the organization. For instance, promotion could be a focus for those who are still working their way up the organizational ladder, while those in higher roles might focus more on sustaining financial benefits, rewards, professional recognition, or other results of their job. Theoretically, therefore, the relationship between job designation and instrumental orientation is significant as organizational position may affect the experiences and expectations of employees with regard to employment rewards (Crompton & Harris, 1998; Furåker et al., 2011; Harpaz & Snir, 2003). But differences should be determined not on the basis of designation alone, but also by means of empirical study. A comparison of researchers in various job-designation groups can provide an indication of whether or not instrumental orientation shows a systematic difference across organizational positions. The present study addresses this issue by comparing instrumental orientation across researchers occupying different job designations in agricultural research institutions in Punjab. This leads to the second hypothesis:

H2: There are statistically significant differences in instrumental orientation based on job designation.

METHODOLOGY

Research Design and Sample

A quantitative, cross-sectional research design was employed. The study was conducted among researchers working in agricultural research institutions in Punjab. Data were collected from 329 respondents through stratified sampling. Stratification was used to ensure representation of researchers from relevant subgroups within the population, particularly across different organizational positions.

Measurement of Instrumental Orientation

Instrumental orientation was measured using three items reflecting the importance respondents attached to extrinsic employment rewards: high income, good opportunities for advancement, and a comprehensive benefits package (Jutz et al., 2018). These items collectively represented the economic, career-related, and material-benefit dimensions of instrumental orientation. Respondents' responses were combined to obtain an overall measure, with higher scores representing stronger emphasis on these instrumental aspects of employment. Additionally, the adequacy of the scale was assessed through its psychometric properties,

including item loadings, internal consistency reliability, convergent validity, and collinearity diagnostics. Descriptive statistics were also calculated to examine the overall distribution and level of instrumental orientation.

Analysis Strategy

To examine differences in instrumental orientation across marital-status and job-designation groups, Welch's one-way ANOVA was employed. Welch's ANOVA was selected because it is appropriate when the assumption of equal variances across groups cannot be confidently maintained and is particularly useful when group sizes are unequal. When the omnibus Welch test indicated statistically significant differences, Games–Howell post hoc tests were conducted to identify differences between individual groups. The Games–Howell procedure was appropriate because it does not require equal variances or equal group sizes. Thus, the combination of Welch's ANOVA and Games–Howell comparisons provided a robust approach for examining whether instrumental orientation differed across the specified demographic and organizational groups.

RESULTS AND DISCUSSION

Measurement Properties of Instrumental Orientation

Table 1 presents the measurement properties of the three-item Instrumental Orientation scale. All three items demonstrated strong factor loadings, ranging from .911 to .920. Specifically, IO1 loaded at .911, IO2 at .920, and IO3 at .912. The corresponding communalities ranged from .830 to .846, indicating that a substantial proportion of the variance in each item was explained by the underlying instrumental orientation construct. The scale demonstrated high internal consistency, with Cronbach's alpha of .901 and composite reliability (CR) of .899. Both coefficients substantially exceeded the commonly accepted threshold of .70, indicating satisfactory to excellent reliability. The variance inflation factor (VIF) values ranged from 2.770 to 2.989, remaining below the commonly used threshold of 5.00. Thus, the results indicate that the scale demonstrated adequate reliability and that multicollinearity among its indicators was not problematic.

Table 1

Items, Loadings, Reliability and Collinearity of Instrumental Orientation Scale

Items	λ	Communality	Alpha	CR	VIF
Instrumental orientation (IO)			.901	.899	
IO1	.911	.830			2.770
IO2	.920	.846			2.989
IO3	.912	.831			2.782

Note: CR = composite reliability, VIF = variance inflation factors, λ = loadings

Descriptive Statistics of Instrumental Orientations

Table 2 presents descriptive statistics for instrumental orientation across marital-status and job-designation groups. Regarding marital status, single respondents reported the highest mean level of instrumental orientation (M = 11.12, SD = 2.617), followed by divorced respondents (M = 8.97, SD = 2.639), whereas married respondents reported the lowest mean (M = 8.52, SD = 2.992). The mean difference between the single and married groups was therefore substantially larger than the differences involving the two other marital-status groups. The 95% confidence intervals also indicated relatively precise estimates, particularly for the single and married groups. For job designation, Scientific Officers reported the highest level of instrumental orientation (M = 10.58, SD = 2.602), followed by Senior Scientists (M = 7.78, SD = 2.643), whereas Principal Scientists reported the lowest mean (M = 5.07, SD = 2.235). The descriptive pattern

therefore suggests considerable variation in instrumental orientation across the three professional designations. However, because descriptive differences alone do not establish whether group differences are statistically significant, Welch's ANOVA and subsequent Games–Howell comparisons were conducted.

Table 2

Descriptive Statistics of Instrumental Orientation Across Various marital Statuses and Job Designations

Variables	N	Mean	S. D	S. E	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Marital Status								
Single	60	11.12	2.617	.338	10.44	11.79	8	15
Married	240	8.52	2.992	.193	8.14	8.90	3	14
Divorced	29	8.97	2.639	.490	7.96	9.97	3	12
Job Designation								
Principal Scientist	14	5.07	2.235	.597	3.78	6.36	3	8
Senior Scientist	154	7.78	2.643	.213	7.36	8.20	3	13
Scientific Officer	161	10.58	2.602	.205	10.17	10.98	5	15

Differences by Marital Status

Table 3

Welch's ANOVA for Instrumental Orientation by Marital Status and Job Designation

Independent variable	Welch's *F*	df1	df2	*p*
Marital status	22.10	2	67.75	< .001
Job designation	66.46	2	37.09	< .001

Welch's ANOVA indicated a statistically significant difference in instrumental orientation across marital-status groups, F (2, 67.75) = 22.10, $p < .001$. Thus, the null hypothesis of equal mean levels of instrumental orientation across the three marital-status groups was rejected. The magnitude of the descriptive means suggests that single respondents placed greater emphasis on instrumental aspects of employment than married or divorced respondents. Games–Howell post hoc comparisons were conducted to identify the specific group differences. As shown in Table 4, instrumental orientation was significantly higher among single respondents than among married respondents, with a mean difference of 2.60, 95% CI [1.67, 3.52], $p < .001$. Instrumental orientation was also significantly higher among single respondents than among divorced respondents, with a mean difference of 2.15, 95% CI [0.72, 3.58], $p = .002$. In contrast, the difference between married and divorced respondents was not statistically significant, mean difference = −0.45, 95% CI [−1.73, 0.84], $p = .678$. Therefore, the overall marital-status effect was attributable primarily to the higher instrumental orientation reported by single respondents, whereas married and divorced respondents did not differ significantly from each other.

Differences in Job Designation

Welch's ANOVA also revealed a statistically significant difference in instrumental orientation across job-designation groups, F (2, 37.09) = 66.46, $p < .001$. This finding indicates that the level of instrumental orientation varied significantly according to researchers' organizational designation. Additionally, the Games–Howell comparisons showed that Principal Scientists reported significantly lower instrumental orientation than Senior Scientists, mean difference = −2.71, 95% CI [−4.34, −1.08], $p = .002$. Principal

Scientists also reported significantly lower instrumental orientation than Scientific Officers, mean difference = −5.51, 95% CI [−7.13, −3.88], $p < .001$. Finally, Senior Scientists reported significantly lower instrumental orientation than Scientific Officers, mean difference = −2.80, 95% CI [−3.49, −2.10], $p < .001$. Thus, all three job-designation groups differed significantly from one another, with the descriptive means following the pattern of Scientific Officers ($M = 10.58$) > Senior Scientists ($M = 7.78$) > Principal Scientists ($M = 5.07$).

Table 4

Games–Howell Post Hoc Comparisons of Instrumental Orientation by Marital Status and Job Designations

Comparison	Mean Difference	SE	95% CI	*p*
Marital Status				
Single – Married	2.60	.39	[1.67, 3.52]	< .001
Single – Divorced	2.15	.60	[.72, 3.58]	.002
Married – Divorced	−.45	.53	[−1.73, .84]	.678
Job Designation				
Principal Scientist – Senior Scientist	−2.71	.63	[−4.34, −1.08]	.002
Principal Scientist – Scientific Officer	−5.51	.63	[−7.13, −3.88]	< .001
Senior Scientist – Scientific Officer	−2.80	.30	[−3.49, −2.10]	< .001

Hypothesis Testing

The results provide support for both proposed hypotheses. *H1* was supported, as instrumental orientation differed significantly according to marital status, F (2, 67.75) = 22.10, $p < .001$. The post hoc analysis showed that single respondents had significantly higher instrumental orientation than both married and divorced respondents, whereas married and divorced respondents did not differ significantly. *H2* was also supported, as significant differences in instrumental orientation were observed across job designations, F (2, 37.09) = 66.46, $p < .001$. The Games–Howell analysis demonstrated significant differences between every pair of job-designation groups, with Scientific Officers reporting the highest mean instrumental orientation, followed by Senior Scientists and Principal Scientists. To summarize, the findings demonstrate that instrumental orientation was not uniform across the researchers surveyed. Both marital status and job designation were associated with significant differences in the extent to which researchers emphasized income, career advancement, and employment benefits as important aspects of work.

The results showed that instrumental orientation of researchers of agricultural research institutes in Punjab is very different, both in terms of marital status and job designation. Single respondents had significantly higher instrumental orientation than the married and divorced respondents, and there was no significant difference between the married and divorced respondents. This pattern implies that researchers' social and family status might be linked to their importance of income, advancement opportunities, and employment benefits. There were also significant differences between the three groups of job designation, with Scientific Officers having the highest instrumental orientation, followed by the Senior Scientists and Principal Scientists. This pattern may be a result of various factors such as the stage in their career, experience in the field, level of position within their organisation, and expectations of future career growth and rewards. The relative greater focus on instrumental rewards among the Scientific Officers might be linked to their relative position in the organizational hierarchy, where promotion and enhancement of employment conditions might be especially relevant. The interpretations should be viewed as contextual explanations, however, and not as causal conclusions, due to the cross-sectional study design, which does not allow for conclusions about the reasons for the group differences.

SUGGESTIONS FOR FUTURE STUDY AND PRACTICE

Future studies should explore the factors which might account for the variance in instrumental orientation, such as income level, household responsibilities, stage in the career, organizational tenure, promotion experiences, job security, and perceived organizational support. Longitudinal studies would be able to establish if instrumental orientations shift across the various career stages or as a result of changes in family context. Further comparative studies using agricultural researchers from other provinces, public and private research institutions, and other professional occupations could further confirm the contextual nature of these findings. In the practical sense, agricultural research institutes could benefit from clear career development pathways, explicit promotion criteria, and fair compensation and benefits systems. Knowing the expectations of employees at various levels of the organization could also be useful for institutions in developing more effective career-development and retention strategies.

CONCLUSION

The results of this study show that there is a significant difference in instrumental orientation among agricultural researchers based on marital status and job designation. Single researchers had higher scores on instrumental orientation than married and divorced researchers, and higher than Scientific Officers, who had higher scores than Principal Scientists and Senior Scientists. The results suggest that researchers' attitudes to income, advancement, and employment benefits are not standard within social and organizational groups. The study adds to the knowledge on work orientation in the under-researched context of agricultural research institutes in Punjab. In opposition to the instrumental orientation as a uniform trait of researchers, the results emphasize that social contexts and organizational positions of employees should be considered in the analysis of instrumental orientation as a perception of the benefits of work.

REFERENCES

Alcover, C.-M., & Topa, G. (2018). Work characteristics, motivational orientations, psychological work ability and job mobility intentions of older workers. *PLoS ONE*, *13*. https://doi.org/10.1371/journal.pone.0195973

Baranik, L. E., Wright, N., & Smith, R. W. (2022). Desired and obtained work values across 37 countries: a psychology of working theory perspective. *International Journal of Manpower*, *43*(6), 1338-1351.

Batool, S., Shahzad, M., Akhtar, C. M. N., Owais, M., & Ghafoor, I. (2023). Evaluating the Differences in Personal Knowledge and Information Management Behaviour Between Agriculture Practitioners and Teachers. *Journal of Agricultural Research (JAR). 61*(4), 321-328.

Berglund, T. (2011). Work Orientations in Western Europe and the United States. In *Commitment to work and job satisfaction* (pp. 47-66). Routledge.

Blackler, F. (1995). Knowledge, knowledge work and organizations: An overview and interpretation. *Organization studies*, *16*(6), 1021-1046.

Busque-Carrier, M., Ratelle, C. F., & Le Corff, Y. (2022). Work values and job satisfaction: The mediating role of basic psychological needs at work. *Journal of Career Development*, *49*(6), 1386-1401.

Charles, N., & James, E. (2003). Gender and work orientations in conditions of job insecurity. *The British Journal of Sociology*, *54*(2), 239-257.

Cortada, J. (2009). *Rise of the knowledge worker*. Routledge.

Crompton, R., & Harris, F. (1998). Explaining women's employment patterns:'orientations to work'revisited. *British journal of Sociology*, 118-136.

Dajani, D. M. A. Z. (2018). Differences in work values by gender and generation: evidence from Egypt.

Dancey, C. P. (1992). The relationship of instrumentality and expressivity to sexual orientation in women. *Journal of homosexuality*, *23*(4), 71-82.

Erickson, B., Fausti, S., Clay, D., & Clay, S. (2018). Knowledge, skills, and abilities in the precision agriculture workforce: an industry survey. *Natural Sciences Education*, *47*(1), 1-11.

Furåker, B., Håkansson, K., & Karlsson, J. C. (2011). *Commitment to work and job satisfaction: Studies of work orientations*. Routledge.

Gillet, N., Vallerand, R. J., & Lafrenière, M.-A. K. (2012). Intrinsic and extrinsic school motivation as a function of age: The mediating role of autonomy support. *Social Psychology of Education*, *15*(1), 77-95.

Goštautaitė, B., Buciuniene, I., & Milašauskienė, Ž. (2019). HRM and work outcomes: the role of basic need satisfaction and age. *The International Journal of Human Resource Management*, *33*, 169-202. https://doi.org/10.1080/09585192.2019.1683049

Haller, M., Klösch, B., & Hadler, M. (2023). The centrality of work: A comparative analysis of work commitment and work orientation in present-day societies. *Sage Open*, *13*(3), 21582440231192114.

Harpaz, I. (1990). The importance of work goals: An international perspective. *Journal of international business studies*, *21*(1), 75-93.

Harpaz, I., & Snir, R. (2003). Workaholism: Its definition and nature. *Human Relations*, *56*(3), 291-319.

Hirschfeld, R. R., & Feild, H. S. (2000). Work centrality and work alienation: Distinct aspects of a general commitment to work. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, *21*(7), 789-800.

Hult, C. (2004). *The way we conform to paid labour: Commitment to employment and organization from a comparative perspective* Sociologiska institutionen, Umeå universitet].

Jonck, P., Van der Walt, F., & Sobayeni, N. C. (2017). A generational perspective on work values in a South African sample. *SA Journal of Industrial Psychology*, *43*(1), 1-9.

Jutz, R., Scholz, E., Braun, M., & Hadler, M. (2018). The ISSP 2015 work orientations IV module. In (Vol. 48, pp. 95-102): Taylor & Francis.

Kirkpatrick Johnson, M. (2005). Family roles and work values: Processes of selection and change. *Journal of Marriage and Family*, *67*(2), 352-369.

Kuchinke, K. P., Ardichvili, A., Borchert, M., & Rozanski, A. (2009). The meaning of working among professional employees in Germany, Poland and Russia. *Journal of European Industrial Training*, *33*(2), 104-124.

Kuchinke, K. P., Kang, H.-S., & Oh, S.-Y. (2008). The influence of work values on job and career satisfaction, and organizational commitment among Korean professional level employees. *Asia Pacific Education Review*, *9*(4), 552-564.

Linando, J. A. (2024). The (non) linearity of religion and work motivation? Exploration across gender, age, marital, and employment status. *INSPIRA: Indonesian Journal of Psychological Research*, *5*(1), 49-61.

Littman-Ovadia, H., Oren, L., & Lavy, S. (2013). Attachment and autonomy in the workplace: New insights. *Journal of Career Assessment*, *21*(4), 502-518.

Lorence, J., & Mortimer, J. (1985). Job Involvement Through the Life Course: A Panel Study of Three Age Groups. *American Sociological Review*, *50*, 618. https://doi.org/10.2307/2095378

Malinowska, D., Tokarz, A., & Wardzichowska, A. (2018). Job autonomy in relation to work engagement and workaholism: Mediation of autonomous and controlled work motivation. *International journal of occupational medicine and environmental health*, *31*(4), 445-458.

Marques, T., Sousa, I. C., & Ramos, S. (2023). Engaging age-diverse workers with autonomy and feedback: the role of task variety. *Journal of Managerial Psychology*. https://doi.org/10.1108/jmp-04-2022-0160

Moya, M., Exposito, F., & Ruiz, J. (2000). Close relationships, gender, and career salience. *Sex Roles*, *42*(9), 825-846.

Ng, T., & Feldman, D. (2014). The Moderating Effects of Age in the Relationships of Job Autonomy to Work Outcomes. *Work, Aging and Retirement*, *1*, 64-78. https://doi.org/10.1093/workar/wau003

Pak, K., Kooij, T., De Lange, A., Van Den Heuvel, S., & Van Veldhoven, M. (2023). Successful ageing at work: The role of job characteristics in growth trajectories of work ability and motivation to work amongst older workers. *Acta psychologica*, *239*, 104012. https://doi.org/10.1016/j.actpsy.2023.104012

Parry, J., & Taylor, R. F. (2007). Orientation, opportunity and autonomy: why people work after state pension age in three areas of England. *Ageing & society*, *27*(4), 579-598.

Roche, K. M., Caughy, M. O., Schuster, M. A., Bogart, L. M., Dittus, P. J., & Franzini, L. (2014). Cultural orientations, parental beliefs and practices, and Latino adolescents' autonomy and independence. *Journal of Youth and Adolescence*, *43*(8), 1389-1403.

Ros, M., Schwartz, S. H., & Surkiss, S. (1999). Basic individual values, work values, and the meaning of work. *Applied psychology: an international review*, *48*(1), 49-71.

Sagie, A., Elizur, D., & Koslowsky, M. (1996). Work values: A theoretical overview and a model of their effects. *Journal of Organizational Behavior*, *17*(S1), 503-514.

Shahzad, M., Akhtar, M. N., & Batool, S. (2023). Assessing the Impact of Personal Knowledge and Information Management Behaviours on the Research Productivity of Agriculture Researchers. *Pakistan Social Sciences Review*, *7*(3), 462-474.

Shahzad, M., Batool, Z., Anjum, F., Mahmood, B., & Chauhdhry, A. (2024). Knowledge Work and Discontent: A Comparative Analysis of Work Alienation by Age and Experience. *Journal of Social Sciences Review*, *4*(4), 77-86.

Shahzad, M., Batool, Z., & Sajid, S. M. (2024). Organizational factors correlated with work alienation: A systematic review. *Qlantic Journal of Social Sciences and Humanities*, *5*(2), 18-27.

Sinclair, S., Nilsson, A., & Holm, K. (2025). The worth of work: Socio-political and demographic correlates of anti-work orientation. *Social Sciences & Humanities Open*, *11*, 101565.

Taipale, S., Selander, K., Anttila, T., & Nätti, J. (2011). Work engagement in eight European countries: The role of job demands, autonomy, and social support. *International Journal of Sociology and Social Policy*, *31*(7-8), 486-504.

Vo, T. T. D., Tuliao, K. V., & Chen, C.-W. (2022). Work Motivation: The Roles of Individual Needs and Social Conditions. *Behavioral Sciences*, *12*. https://doi.org/10.3390/bs12020049

Volk, H., & Hadler, M. (2018). Work orientations and perceived working conditions across countries: results from the 2015 ISSP survey. *International Journal of Sociology*, *48*(2), 103-123.

Waterwall, B., Chullen, C. L., Barber III, D., & Adeyemi-Bello, T. (2023). The roles of experience and gender in shaping work values. *Higher Education, Skills and Work-Based Learning*, *13*(1), 131-147.