

Ep Journal of Business Strategy

Volume No. 13

Issue No. 2

May - August 2025



ENRICHED PUBLICATIONS PVT.LTD

**JE - 18, Gupta Colony, Khirki Extn,
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Ep Journal of Business Strategy

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(Volume No. 13, Issue No. 2, May - August 2025)

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MINIMUM WAGE LAWS AND TOP INCOME SHARES: EVIDENCE FROM A LARGE PANEL OF STATES

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ABSTRACT

Over the three decades prior to the onset of the Great Recession in 2007, the income share of the top 1% in the United States rose by over 150% (from 9.3% to 23.5%). During the same period, the real federal minimum wage fell by about 35% (from \$8.92 to \$5.76 in 2011 dollars). This paper uses a comprehensive panel of U.S. states to explore the effect of changes in the real minimum wage on top income shares. Our findings indicate that the relationship between is negative in nature, but not robust to small changes in the econometric specification or in the measurement of inequality.

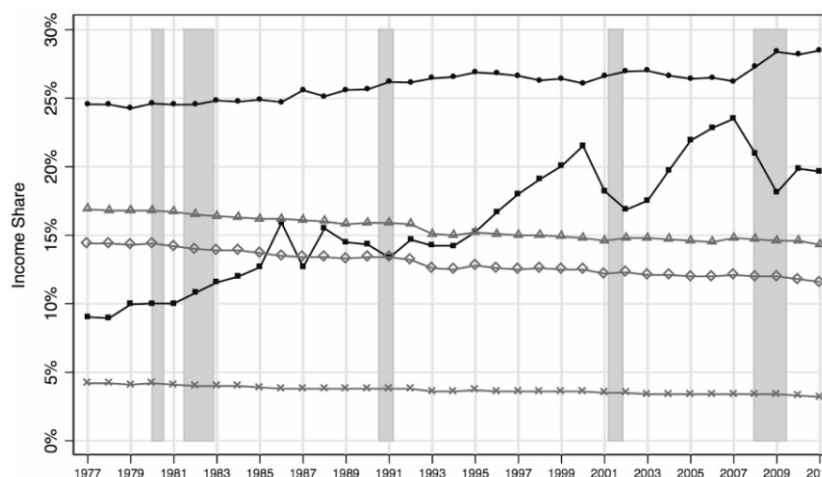
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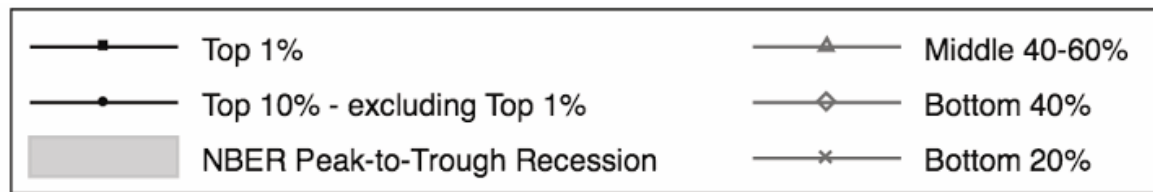
Keywords: *Income Inequality, Minimum Wage Laws, U.S. States*

INTRODUCTION

Few issues in economics have received as much attention as the recent rise in income inequality, and in particular, the rise in top income shares. The seminal work by Piketty and Saez (2003) shows that the rise in income inequality experienced in the U.S. since the late-1970s has been primarily driven by income changes in the upper-end of the distribution (see also Burkhauser, et. al. 2012, Piketty and Saez 2014). Figure 1 illustrates this point by presenting recent trends in income shares at various points of the income distribution.¹ When compared to the top 1%, the changes in shares from other parts of the distribution appear minor. Even the increase in the income share of the top 10% is relatively pedestrian once the top 1% is removed (rising from 24.5% in 1977 to 28.5% in 2011). The top 1%'s income share, by contrast, rose from 9.3% in 1977 to 23.5% on the eve of the Great Recession in 2007.

Figure 1
U.S. Income Shares

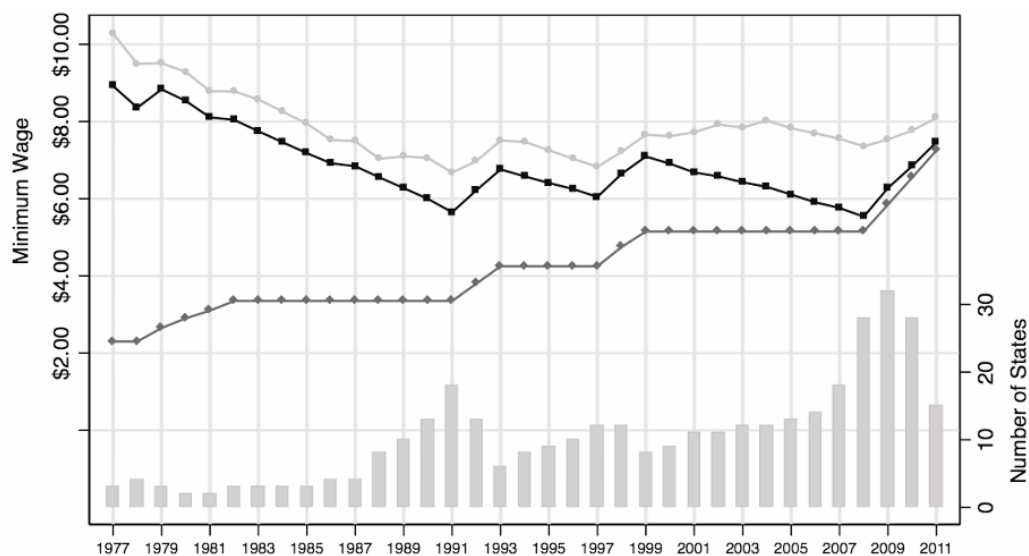


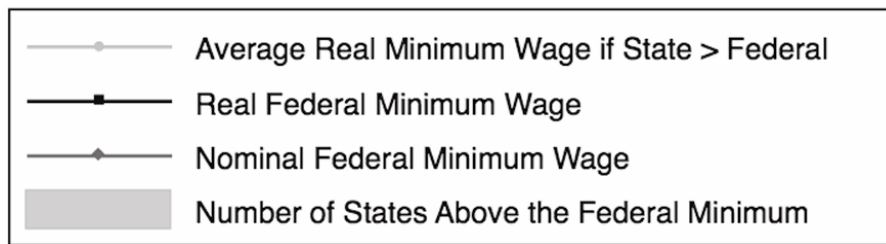


Policy reactions to this rise in top income shares have ranged from taxing capital (see Piketty 2014), to calls for greater investment in human capital (see Goldin and Katz 2008), to measures aimed at shifting the balance of power in the workplace, such as strengthening worker unions or increasing the minimum wage (see Stiglitz 2012). In this paper, we look at the later of these policy options: using minimum wage laws to redress the increase in top income shares.

Federal minimum wage laws in the U.S. are an interesting case because while the nominal minimum wage has increased, the real federal minimum wage fell about 35% over the three-decade period prior to the onset of the Great Recession in 2007 (see Figure 2). Notably, this fall in the real minimum wage correlates inversely with the rise in the top 1% income share shown in Figure 1. Many states, however, compensated for the real decline in the federal minimum wage by raising their own state minimum wage above the federal mandate (also shown in Figure 2). In this paper, we use this variability unique to the state-level to help identify the income inequality effects from real minimum wage changes. We argue that given the frequency of changes at the state-level, states are, consequently, the proper unit-of-analysis for investigating these effects.

Figure2
Federal and State Minimum Wage Levels





For changes in the real minimum wage to have a meaningful role in accounting for the rise in top income shares, these changes must go beyond a purely mechanical effect on wages. Instead, they must have spillovers onto wages beyond those at (or near) the minimum. The previous literature is sparse in this regard, with only about a half dozen articles broadly investigating the impact of minimum wage laws on income inequality. Most of this prior work has focused on spillover effects in the lower-half of the income distribution (see DiNardo, Fortin, and Lemieux 1996, Lee 1999, Card and DiNardo 2002, Dickens and Manning 2004, and Autor, Katz and Kearney 2008). A notable exception, however, is Autor, Manning, and Smith (2016); they find some evidence of spillovers into the upper-half of the income distribution (e.g., the 90/10 ratio). They do not consider spillovers into the upper-tail, however. As Figure 1 illustrates, this is a significant omission given that increases in U.S. income inequality over recent years have been driven by income increases in the upper-tail (i.e., the top 1%).

To our knowledge, this is the first paper to evaluate the impact of minimum wage changes on the rise in top income shares at the state-level. Prior research has focused on other parts of the income distribution, and as a result, used state-level distributional data available from the March Current Population Survey (CPS). March CPS data does not, however, account for much of the rise in the top 1% since it omits relevant information on capital gains, stock options, and bonuses (see Burkhauser, et. al. 2012). Thus, we depart from the use of March CPS data, and instead use the IRS-based top income shares constructed by Frank (2009).

We base our econometric approach on the voluminous literature testing the role of minimum wage laws on employment. Much of this research is based on the seminal work of Card and Krueger (1994), and relies on the difference-in-differences estimation approach (see Neumark and Wascher 2007). Although this literature is focused on questions of employment and employment growth, its methodology is a good candidate because it is well vetted in the state-level panel context, and is able to exploit the unique state-level variations present in minimum wage laws (as shown in Figure 2). Moreover, the contexts of employment and income distribution are necessarily related, as distributional changes are a consequence of changes in earnings and employment.

While the initial results are promising, we ultimately conclude that the relationship between the minimum wage and top income shares is not particularly robust. Though consistently negative in sign, we find that small changes in the econometric specification, as well as the measurement of income inequality, lead to statistically insignificant associations. Hence, we conclude that changes in the minimum wage do not appear to have meaningful spillovers into the upper-tail of the income distribution, and fail to find support for the claim that increases in the minimum wage might lead to a lowering of top income shares.

In the following section, we introduce our state-level panel. Section III then presents the difference-in-differences estimation and results from our empirical investigation. Section IV offers a brief set of conclusions.

DATA

Our sample consists of annual state-level data for the period 1977-2011. We include the District of Columbia in the sample, meaning we have 51 cross-sections and 35 years of data (for a total of 1785 observations). Descriptive statistics for all the variables used in the analysis are shown in Table 1. The top income share measures are taken from the comprehensive panel of income inequality measures constructed by Frank (2009).² The state-level measures of Frank are based on income data reported by the IRS using individual tax returns, and follow the construction methodology of the national panel of top income shares constructed by Piketty and Saez (2003). Though the focus of this paper is on top income shares, later in the analysis we extend our estimations to include the Gini coefficient, a broad measure of income inequality.

Table 1
Summary Statistics

	Mean	Std. Dev.	Median
State minimum wage (\$)	4.40	1.360	4.25
State minimum wage (\$real)	7.09	0.916	6.89
<i>Income Inequality Measures:</i>			
Top 1% Income Share	0.14	0.0444	0.13
Top 1% Growth Rate	0.025	0.0887	0.029
Top 10% Income Share	0.38	0.0529	0.38
Gini Coefficient	0.56	0.0507	0.56

Top 1% Growth Rate	0.025	0.0887	0.029
Top 10% Income Share	0.38	0.0529	0.38
Gini Coefficient	0.56	0.0507	0.56
<i>Additional Controls:</i>			
GSP/capita (\$real)	41,591.6	16,309.7	38,447.1
Unemployment Rate	6.03	2.101	5.70
Population (thousands)	5,160.6	5,725.6	3,513.4
Pop Share Aged 15-59	61.7	1.957	61.7
Observations	1785		

Notes: The panel includes each state plus Washington D.C. ($n = 51$) annually over the period 1977-2011 ($t = 35$).

For the state minimum wage data, we use information provided by the U.S. Department of Labor.³ We also compared our data to that of Meer and West (2013), and verified any differences with state-level sources. To assure proper casual ordering between the variables, we use the previous year's value of the minimum wage (as of March 12th) in our panel estimations. For states that use a multi-track menu of minimum wages, we use the maximum wage in this menu, as is common in the literature. State-level price indexes are not available; hence we use the national CPI-U available from the Bureau of Labor Statistics to the data into constant 2011 dollars.

The other control variables we use in the analysis are widely available. The state-level real gross domestic product per capita is taken from the Bureau of Economic Analysis's Regional Economic Accounts.⁴ State unemployment rates are taken from the Bureau of Labor Statistic's Local Area Unemployment Statistics division.⁵ Total state population and the share of population aged 15-59 are from the Census Bureau's Population Estimates division.⁶

ESTIMATION

The use of state-level panels to explore the effects of minimum wages on top income shares is surprisingly sparse. Without a direct literature to base our econometric approach upon, we take the view that the voluminous literature on minimum wages and employment is a strong substitute. This literature

is based largely on the seminal work of Card and Krueger (1994), which uses the difference-in-differences estimation approach (for an overview, see Neumark and Wascher 2007). While this literature is narrowly focused on the effect of minimum wages on employment and employment growth, its methodology is a good candidate because it is well vetted in the state-level panel context, and because income distributional changes are in part a consequence of the employer/employee relationship. Hence, in the respect that changes in the minimum wage result in higher or lower earnings among employees, or less employment overall, then changes in the minimum wage may have a meaningful impact on the distribution of income within a population.

The difference-in-differences approach contrasts a state's level of income inequality before and after a change in its minimum wage, relative to the counterfactual change in the other states' level of income inequality. The appropriate counterfactual state is important here, as states are necessarily heterogeneous in their adjustment of the minimum wage and other socioeconomic factors. To improve the quality of the counterfactuals, we follow the minimum wage and employment literature in testing a variety of space and time effects, as well as business cycle controls (see Meer and West 2013).

Accordingly, the first specification we use is the classic panel difference-in differences estimator:

$$\text{Inequality}_{s,t} = \beta \cdot \ln(\text{MinWage})_{s,t} + \mu_s + \tau_t + \varepsilon_{s,t}, \quad (1)$$

where μ_s is the time-invariant fixed effect for state s , τ_t is the state-invariant time effect for time t , and ε is the idiosyncratic, time and state-varying error term.

Different regions within the country, however, may face heterogeneous economic shocks correlated with changes in the minimum wage. Hence, in Specification (2), we allow for time fixed effects that vary across the four census regions ($\tau_{r,t}$):

$$\text{Inequality}_{s,t} = \beta \cdot \ln(\text{MinWage})_{s,t} + \mu_s + \tau_{r,t} + \varepsilon_{s,t}. \quad (2)$$

Furthermore, to appropriately capture changes in inequality that might be correlated with changes in the state minimum wage, Specification (3) adds state linear time trends ($\eta_s \cdot t$):

$$\text{Inequality}_{s,t} = \beta \cdot \ln(\text{MinWage})_{s,t} + \mu_s + \tau_{r,t} + \eta_s \cdot t + \varepsilon_{s,t}. \quad (3)$$

Finally, Specification (4) adds additional control variables to capture variations in state-level economic climates:

$$\text{Inequality}_{s,t} = \beta \cdot \ln(\text{MinWage})_{s,t} + \mu_s + \tau_{r,t} + \eta_s \cdot t + \alpha \cdot X_{s,t} + \varepsilon_{s,t}. \quad (4)$$

In this specification, $X_{s,t}$ is a vector of explanatory variables that includes real gross state product per capita, state unemployment rates, total state population, and the share of the state population aged 15-59.

Column [1] of Table 2 shows the effect of minimum wages on the income share of the top 1% across the four specifications defined above. The results are small but fairly consistent across the econometric specifications, though statistically significant in only in the initial specification (Row 1). Taken together, the estimates in Column [1] imply an elasticity between -0.16 to -0.14. That is, a real minimum wage increase of 10% reduces the income share of the top 1% by about 1.5 percentage points.

Table 2
Effect of the Minimum Wage on Top Income Shares

Model Specification:	Dependent Variable:				Obs.
	[1] Top 1%	[2] Top 1% Growth	[3] Top 10%	[4] Gini	
(1) μ_s, τ_t	-0.0212** (0.0083)	-0.0457** (0.0216)	0.0230 (0.0167)	-0.0203 (0.0151)	1785
(2) $\mu_s, \tau_{r,t}$	-0.0214 (0.0132)	-0.0338 (0.0234)	0.0053 (0.0180)	-0.0150 (0.0164)	1785
(3) $\mu_s, \tau_{r,t}, \eta_s \cdot t$	-0.0218 (0.0167)	-0.0713 (0.0441)	-0.0123 (0.0100)	-0.0355* (0.0186)	1785
(4) $\mu_s, \tau_{r,t}, \eta_s \cdot t, X_{s,t}$	-0.0198 (0.0160)	-0.0776 (0.0464)	-0.0069 (0.0083)	-0.0329* (0.0171)	1785

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Robust standard errors are reported in parenthesis. Sample uses annual state data from 1977-2011. Model Specification: μ_s is the time-invariant fixed effect for state s , τ_t is the state-invariant time effect for time t , $\tau_{r,t}$ is the census region time fixed effects, $\eta_s \cdot t$ is the state linear time trends, and $X_{s,t}$ is a vector of explanatory variables that includes real gross state product per capita, state unemployment rates, total state population, and the share of population aged 15-59.

It is possible, however, that the dynamics of the top 1%'s income share are more appropriate to look at, given that transitions in the levels of inequality may be slow. With this in mind, Column [2] evaluates the growth rate of the top 1%. The results are more volatile in magnitude, as one would expect given the higher standard deviation of the top 1% growth rate, but are statistically significant again in only the initial specification. Recall that Row (2) reflects changes relative to each region's linear time trend, while Rows (3) and (4) reflect changes relative to each state's linear time trend. The statistically significant results for the top 1% from Row (1) are then likely an artifact of ignoring state or regional

time trends.

Column [3] of Table 2 extends this exploration by instead using the income share of the top decile. Here, the results are quite volatile (changing in both magnitude and sign), and none are statistically significant.

Finally, Column [4] tests a fourth measure, the Gini coefficient. Unlike top income shares, the Gini coefficient is a broad measure of income dispersion, capturing changes throughout the income distribution. The results here appear consistent in sign and magnitude, and are statistically significant when state linear time trends are included (Rows 3 and 4). The overall effect from these two cases, however, is quite small, with an implied elasticity of around -0.06.

In Table 3 we present several alternative specifications to assess the robustness of the results. As a reference, Row (1) from Table 3 reproduces the baseline results for each of the four inequality measures reported in Row (4) of Table 2.

Table 3
Robustness Checks for the Effect of the Minimum Wage
on Top Income Shares

Model Specification:	Dependent Variable:				Obs.
	[1] Top 1%	[2] Top 1% Growth	[3] Top 10%	[4] Gini	
(1) $\mu_s, \tau_{r,t}, \eta_s \cdot t, X_{s,t}$	-0.0198 (0.016)	-0.0776 (0.046)	-0.0069 (0.008)	-0.0329* (0.017)	1785
(2) Census Division	-0.0128 (0.017)	-0.0803 (0.053)	0.0014 (0.011)	-0.0129 (0.019)	1785
(3) Quadratic Trend	-0.0245 (0.016)	-0.0909* (0.053)	-0.0073 (0.006)	-0.0348** (0.017)	1785
(4) Non-Indexing	-0.0163 (0.016)	-0.0772 (0.048)	-0.0073 (0.009)	-0.0360** (0.017)	1740
(5) Pre-2008 Only	-0.0170 (0.021)	-0.0607 (0.063)	-0.0153 (0.011)	-0.0335 (0.020)	1581
<i>Minimum Wage Alterations:</i>					
(6) MW_t	-0.0224 (0.020)	-0.0511 (0.053)	-0.0107 (0.010)	-0.0401* (0.022)	1785
ΔMW	0.0008 (0.002)	-0.0084 (0.008)	0.0012 (0.001)	0.0023 (0.002)	

(7) MW_t	-0.0169 (0.016)	-0.0565 (0.054)	-0.0128 (0.008)	-0.0240 (0.016)	1734
MW_{t-1}	0.0040 (0.010)	-0.0188 (0.041)	0.0076 (0.007)	-0.0092 (0.010)	
(8) MW_t	-0.0109 (0.012)	-0.0816* (0.048)	0.0027 (0.007)	-0.0207 (0.013)	1734
MW_{t-1}	-0.0142 (0.016)	0.0060 (0.047)	-0.0140** (0.006)	-0.0167 (0.016)	
(9) MW_t	-0.0184 (0.014)	-0.0981** (0.044)	-0.0026 (0.008)	-0.0302* (0.016)	1683
MW_{t-2}	-0.0046 (0.019)	0.0581 (0.058)	-0.0141* (0.007)	-0.0063 (0.020)	

Notes: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. Robust standard errors are reported in parenthesis. Sample uses annual state data from 1977-2011. Row (1) replicates row (4) from Table 2.

In Row (2) we replace the four census regions time effects ($\tau_{r,t}$) with time effects from the nine census divisions. With this specification change, we find that none of the estimated minimum wage coefficients are statistically significant, including that from the Gini coefficient in Column [4].

Quadratic state-time trends are added to the baseline specification in Row (3). Allowing for nonlinear time effect appears beneficial as both the top decile and Gini coefficient become statistically significant. The top 1% income share and growth rate, however, remain insignificant (as they are in the baseline results).

In Row (4) we drop all observations from states that shifted to indexing their minimum wage for inflation. This leads to the dropping of only 45 observations, as inflation indexing is a fairly new phenomenon. This does not appear to be a meaningful alteration, as the estimated results in Row (4) are quite similar to the baseline results in Row (1).

In Row (5), we instead use only the pre-Great Recession observations, as this period is marked by substantial volatility among the income inequality measures. With this specification change, we find that none of the estimated minimum wage coefficients are statistically significant.

Finally, Rows (6)-(9) test several alterations of the minimum wage variable: Row (6) adds a dummy variable for periods when the nominal minimum wage is changed, Row (7) adds a one period lead of the minimum wage, and Rows (8) and (9) include a one- and two-period lag of the minimum wage. Lags are useful in picking up delayed effects that might result from a slow adjustment process following a minimum wage change. A lead, on the other hand, is useful if the adjustment process begins before the implementation of a minimum wage hike. Given that there is often a delay between the passage of minimum wage legislation and its implementation, it is plausible that firms anticipate these changes and begin their adjustment process before legislative enactment.

None of these alterations in the minimum wage appear to add much power to the original minimum wage coefficients. All previously insignificant minimum wage coefficients from the baseline specification (Row 1) remain statistically insignificant. In addition, the estimates from the Gini coefficient measure (Column 4) become statistically insignificant when either a one-period lead or lag of the minimum wage is included. Moreover, the alternative minimum wage variables are also generally statistically insignificant across the estimations. The only exception is with the top decile measure in Column [3] when using either a one- and two-period lag (Rows 8 and 9).

CONCLUSION

This paper has employed a state-level panel to evaluate the relationship between minimum wage laws and top income shares. Our results indicate that the relationship is not particularly robust. While consistently negative in sign, we find that small changes in the econometric specification, as well as the measurement of income inequality, lead to statistically insignificant associations. In total, we report twelve alternative model specifications using three different measures of top income shares; of these 36 estimated minimum wage coefficients reported, only two are statistically significant at the $p < 0.05$ level (see Table 2, Row 1, Columns 1 and 2). Two is also approximately the same number one would expect to find falsely significant at a 95% confidence level, given the number of estimations conducted.

However, the results are marginally more robust when the Gini coefficient is used instead of a top income share measure (see Column 4 in Tables 2 and 3). This is less surprising given that prior empirical research has found positive effects from the minimum wage occurring within the lower-half of the income distribution (see DiNardo, Fortin, and Lemieux 1996, Lee 1999, Card and DiNardo 2002, Dickens and Manning 2004, and Autor, Katz and Kearney 2008). One would expect such a result if minimum wage changes have spillover effects upon workers earning at and near the minimum wage. Spillovers unto those in the upper-half of the income distribution have also been found (see Autor, Manning, and Smith 2016). Whether spillovers extend into the upper-tail (e.g., the top 1%) has not, to our knowledge, been considered prior to this paper.

The lack of statistical robustness from our results thus casts doubt on whether increases in the minimum wage can help mitigate the rise in top income shares. In a broader sense, investing in education and skills may be a better long-term remedy for reducing income disparities (see Goldin and Katz 2008). The public's appetite for long-term solutions, however, is famously fickle. This short-term focus may in fact be driving parts of the public discussion with respect to the minimum wage. The evidence presented here, nonetheless, would suggest caution is warranted in taking this view.

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Does sex sell? Gender representation, sexualization, and violence on video gamecovers and their impact on sales

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ABSTRACT

This study examines the cover design of 1,113 video games. Based on cue utilization theory, it is argued that video game covers represent important product cues that should affect sales as consumers evaluate them before purchasing. Analysis of the data shows that the depiction of male and female characters along with the illustration of violence on the covers has no statistical impact on sales. However, sexualized depictions are associated with a negative sales impact in key genres and market segments when controlling for publication year, publisher and platform type. But there is evidence that the use of sexualized images as a sales strategy works in less significant market segments such as puzzles, miscellaneous, simulation, and strategy games. The results of the study therefore indicate that the advertising strategy with sexualized covers is not effective in all segments of the video game market. The implications of this result are discussed in detail.

Keywords: Video Games, Sales, Cue Utilization Theory, Cover Design, Sexualization, Violence.

1. Introduction

Video games are generally developed for a male target market (Williams et al., 2009). In order to increase sales figures, marketers therefore tend to rely on oversexualized depictions of female characters on promotional posters and covers. This is done, for instance, by emphasizing female features or depicting women in sexually provocative poses (Paul Stermer & Burkley, 2012; Burgess et al., 2007; Ivory, 2006). However, whether the sex sells logic really works on the games market has not yet been investigated.

This question is particularly interesting for two reasons. First, recent studies show that game consumption between male and female consumers has almost converged in the past few years, which means that men and women now play video games in roughly equal proportions (Lopez-Fernandez et al., 2019; Lynch et al., 2016). Second, some empirical research has cast fundamental doubt on the effectiveness of the sex sells strategy (Gramazio et al., 2021; Lawrence et al., 2021). For example, Bongiorno et al., 2013 report that the use of sexualized advertising can lead to negative reactions among consumers. Female consumers in particular appear to be less receptive to sexualized advertising content (Dahl et al., 2009). Therefore, the reduction to their appearance and signaling of sexual availability and submissiveness in advertising can lead to female consumers experiencing

devaluation based on their gender, which can negatively impact sales (Norris, 2004).

Given the inconclusive empirical findings of advertising research in general and the lack of systematic considerations of the sex-sells hypothesis specifically in the context of the video game industry, this article aims to examine the influence of sexualized covers on video game sales. In doing so, the study extends the existing literature in several ways.

First, the study uses cue utilization theory to examine how cover design affects video game sales. Following previous research, it is argued that video game covers are used by game producers to indicate the content of their products (Choi et al., 2018; Langan et al., 2017). The cover can therefore be interpreted as a product-specific cue that helps to reduce information asymmetries between buyers and sellers.

Second, the study categorizes over 1,000 video game covers spanning a period of more than four decades and uses regression analysis to determine how cover design has influenced sales. The analysis allows important insights into the video game market, which has been little studied from an economic perspective.

Third, the study comes to surprising conclusions. Although the excessive use of sexualized content in the video game industry is obvious, a sales-promoting effect for the most important game genres cannot be empirically proven. On the contrary, the results even indicate a negative sales effect in the most important market segments when sexualized material is used on covers. This shows that the prevailing marketing logic in the video game industry needs to be questioned.

The rest of the article is structured as follows. In the next section, the cue utilization theory is presented. Cue utilization strategy states that consumers want to reduce information deficits before making a purchase by evaluating product cues such as cover images. Section 3 briefly reviews the existing literature related to violent and sexualized depictions on video game covers. Section 4 presents the measurement and coding of the variables and explains the structure of the regression analysis. Finally, the results of the empirical analysis are presented and discussed in Section 5. This study shows that sexualized cover images are associated with lower sales figures in the sample. The implications of these findings along with the limitations of the study and a research outlook are presented in conclusion.

2. Cue Utilization Theory

Cue utilization theory deals with the question of how people use various cues to make their decisions. According to the theory, a product consists of a variety of quality cues. These cues may include, for example, the price, packaging, or product description, which indicate the potential quality of the product to the consumer.

The literature commonly distinguishes between intrinsic and extrinsic cues (Olson & Jacoby, 1972). Intrinsic cues are derived directly from a product and therefore cannot be changed or manipulated without altering the product itself. Extrinsic cues, on the other hand, can be easily manipulated and are not inherent to the product. The cue typology has been used in numerous studies to understand how cues influence the perceived quality and purchase intentions of consumers (Veale & Quester, 2009). The results of these studies generally suggest that both intrinsic and extrinsic cues are closely related to perceived quality and purchase intention (Choi et al., 2018).

In the context of video games, the design of the cover has proven to be an important extrinsic cue for consumer evaluation (Phan et al., 2015). Video game covers provide a whole range of visual information, such as the genre, setting, game mechanics, or playable characters, which give potential customers an indication of quality (Bergvall & Dymek, 2005). In this regard, cue utility theory states that consumers can understand the embedded information to draw their own conclusions about the content of video games (Langan et al., 2017). Following this logic, the design of the cover must have an influence on the perception of quality and thus on sales of video games.

3. Gender Representation in Video Games

The representation of men and women in video games has long been a topic of research. Studies have shown that male characters have been over-represented since the early days of the video game industry (Nguyen et al., 2020; Gestos et al., 2018). They appear around four times more frequently than female characters (Downs & Smith, 2010). This inequality is also reflected in the type of roles female characters take on. They often only play supporting roles and are frequently oversexualized (Williams et al., 2009). For example, female characters are often shown with their legs spread, in provocative clothing or partially or completely naked (Ivory, 2006).

Sexualized fantasies of violence against women are a common element in popular video games. Despite some progress, the systematic marginalization, over-sexualization, and objectification of women in video games has changed little over the years. Current analyses continue to show strongly stereotypical and masculinized gender representations in video games (Sarda et al., 2022;

Schmierbach, 2016; Near, 2013; Marchand & Hennig-Thurau, 2013). Data collection on vgchartz.com included average user ratings, publisher and genre information, game release year, as well as detailed sales statistics.

At the time of data collection, about 40 thousand games were listed on vgchartz.com. Sales data for North America was available for about two thirds of the video game listings. This reduced the number of relevant data listings to about 26 thousand. In order to exclude small niche games and insignificant game projects, the focus was placed on those titles with total sales of more than 100 thousand units. This restriction further reduced the total sample to about 9 thousand observations. Of these remaining games, about 15 percent had user rating information. Given that user ratings are generally considered to have a decisive influence on sales figures (Brunt et al., 2020; Near, 2013) and given that this information was particularly important for the analysis, the sample size was further reduced to 1,350 game entries. After further adjustment for missing values on publisher and platform information, as well as cover images, a final sample of 1,113 video games was obtained for analysis.

Of particular interest for the analysis were the images of video game covers. Much of the visual data material was again retrieved from vgchartz.com. In the case of missing entries or images that were scaled too small for analysis, additional searches were made in the online databases of igdb.com and mobygames.com. Both websites offer extensive visual material on video games and were therefore a good starting point for the study.

The focus was placed on the cover images designed for the North American sales territory. Note that the back cover design was not considered in this study. This is a limiting aspect because the front and back cover images can be designed differently. However, the emphasis on the front cover has a pragmatic reason. While the game in traditional retail has both a front and back cover, in digital stores it is often limited to the front cover only.

To categorize the imagery on the covers, a coding scheme based on the Entertainment Software Rating Board (ESRB) criteria was used. Of particular interest were violent and sexualized depictions. According to the ESRB, intense violence includes graphic and realistic depictions of physical conflict, extreme and realistic blood, bloody bodies, weapons, and depictions of human injury, mutilation, and death (Entertainment Software Rating Board (ESRB), 2022). In addition, all symbols suggestive of war and combat, military vehicles, images of soldiers, military special forces, or police, aggressive poses, facial expressions of pain, and martial arts were also considered as violence depictions in this study.

Cunningham et al., 2016).

Research also shows that men and women consume video games differently. Men often prefer violent genres, while women tend to like roleplaying and interactive games (Greenberg et al., 2010). However, there is also a growing popularity of so-called "pink games" or genres that are traditionally considered feminine (Dickey, 2006). Nevertheless, stereotypical gender images are also widespread here. For example, female characters are often portrayed as cooking mothers, pretty princesses, or sporty fitness trainers (Jansz & Vosmeer, 2009).

One possible explanation for the one-sided content in video games could lie in the structure of the industry itself. This is because the video game industry is extremely unbalanced in terms of gender diversity (Chess et al., 2017). Only a small proportion of employees in the industry are female designers, programmers, or producers (Nyugen et al., 2008). Video games are therefore predominantly developed by men. However, it can also be argued that women are marginalized and harassed when consuming video games because of their gender (Fox & Tang, 2014). This could explain why female consumers use video games significantly less than their male counterparts.

While many studies have focused on the content of video games, cover design has been largely ignored in scientific literature. However, covers represent an interesting area of research as they provide a visual condensation of video game features (Phan et al., 2015). They also serve important marketing functions by attracting the attention of potential customers and providing immediate information about what players can expect during the long-lasting gaming experience (Bergvall & Dymek, 2005). This is especially important for casual gamers, as they are less engaged with the game and therefore rely more heavily on the informative function of the cover (Burgess et al., 2007). So far, there are only a handful of studies that have taken a closer look at video game covers (Nguyen et al., 2020; Choi et al., 2018). However, the few studies that do exist provide a consistent picture. According to the findings, women are underrepresented on video game covers and are often hyper-sexualized and portrayed in violent contexts (Near, 2013).

4. Data and Methodology

To empirically test how cover design affects video game sales, a unique data set was constructed. Most of the data were obtained from the website vgchartz.com. This website provides the most comprehensive sales data for the video game industry and is therefore an important reference point in academic research interested in economic outcomes (Cunningham et al., 2016; Sherrick &

Graphic sexual content is defined as all depictions of sexual behavior, including nudity (Entertainment Software Rating Board (ESRB), 2022). This definition specifically includes depictions of nude bodyparts, provocative and skimpy outfits, sexual poses and gestures, as well as the overemphasis of physical features such as lips, breasts, and hips, or well-defined muscle areas. Outlines of human bodies are also considered sexualized depictions if one or more of the previously mentioned points apply.

The screening of the video game covers was conducted by three independent persons. Disagreements in the classifications were discussed extensively and decided by majority vote. Controversial valuations, however, accounted for less than one percent and were thus the exception.

In addition to sexualized and violent depictions, it was also measured whether male or female characters were featured on the covers. Fantasy characters were also classified as male or female if a clear categorization seemed plausible and meaningful. For instance, the Super Mario Bros. were considered male characters because a clear classification was possible. Pokemon Pikachu, on the other hand, although the character was supposed to be male, was not classified in the male/female pattern because clear categorization attributes that would point to a specific gender were missing. Again, an important note. Since only the front cover was considered, some characters may not have been included in the analysis if they were only shown on the back cover.

To estimate how cover design affects sales, the following regression model was used:

$$\begin{aligned}
 SALES_i = & \beta_0 + \beta_1 User\ Rating_i \\
 & + \beta_2 Male\ Character_i \\
 & + \beta_3 Female\ Character_i \\
 & + \beta_4 Violence_i \\
 & + \beta_5 Sexualization_i \\
 & + \beta_6 Time_i \\
 & + \beta_7 Time_i^2 \\
 & + \beta_j Platform\ dummies_i \\
 & + \beta_l Genre\ dummies_i \\
 & + \beta_k Publisher\ dummies_i \\
 & + \varepsilon_i
 \end{aligned}$$

The dependent variable sales refers to the sales in North America and was measured in millions of copies sold. Since the distribution of sales has a strong skewness, a log transformation was performed as suggested by other authors (Bruno et al., 2020). Thus, the model is given in a semi-log specification. All regressors in the model, with the exception of user rating, are dummy variables. Note that because of the semi-log specification, the percentage effect of a dummy variable on sales is equal to

$100 \cdot e^{\beta} - 1$.

As the study analyzes data over a period of several decades, the time variable was also integrated into the regression estimates as a control. This procedure is common in empirical research on the analysis of time series (Hanssens et al., 2003). In order to ensure the best possible data fit and to capture both linear and non-linear developments over time, a second-order polynomial was estimated. The polynomial is designed to account for the various dynamic changes that the video game industry has experienced over time (Mattioli, 2021; Nicholas David, 2018).

In order to reflect the various developments, several sub-samples were also formed. The first subsample covers the 1980s and 1990s. During this period, many iconic games and characters were developed that are still popular today. Examples include Donkey Kong, Legend of Zelda, and Mario Bros. This period also marked a technological boom in the industry. For instance, the rise of the PC, the emergence of 3D graphics and console classics such as the Super Nintendo were important innovations that revolutionized game development.

The second sub-sample covers the 2000s. This period was characterized by a major transformation in which the video game industry developed into a billion-dollar blockbuster producer. This development was driven by rapid technological progress in both consoles and PCs. At the same time, the internet became a mass phenomenon. Among other things, this has boosted the popularity of online games and contributed to the professionalization of eSports.

Finally, the third sub-sample focuses on modern developments from the 2010s onward. This phase is primarily characterized by the emergence of mobile games on smartphones. Today, mobile games represent the fastest growing segment in the overall market. Growth is driven on the one hand by innovative marketing concepts such as in-game purchases, and on the other by the increasing importance of future technologies such as virtual reality. So, in summary, the three sub-samples represent different periods of the video game industry, characterized by different technical innovations, commercial importance, and popularity.

5. Empirical Results

The empirical analysis begins with a descriptive evaluation. In the sample, human characters are featured on about 83 percent of video game covers. Male characters are depicted more frequently (63

percent) than female characters. These results are largely consistent with previous studies that have found an imbalance between the representation of male and female characters on covers. However, as shown in Table 1, the overall ratio of male to female depictions has leveled off over time. While in the 1980s the ratio of male to female characters on covers was about 1 to 8, over the past decade this imbalance has decreased to only 1 to 3. Similar to previous research, it was found that depictions of violence and sexualized imagery are prevalent on game covers. However, violent images, at around 36 percent, are significantly more prevalent than sexualized images

Table 1: Changes in Cover Design over Time

Period	1981-1990	1991-2000	2001-2010	2011-2021	Full Sample
Male Character	49%	44%	66%	73%	63%
Female Character	6%	15%	21%	30%	22%
Violent Depiction	17%	25%	37%	46%	36%
Sexualized Depiction	6%	15%	12%	13%	13%

which only account for around 13 percent. In addition, covers with sexualized depictions correlate negatively with sales figures (see Table 2). In contrast, violent images correlate positive with sales. The results of the regression estimates are shown in Table 3. The proportion of variance explained varies among the estimates between 22 and 34 percent, which can be accepted as a satisfactory value. User rating is estimated as the main control variable with a positive sign and high statistical significance, which is consistent with previous research (Brunt et al., 2020; Cox, 2014). In contrast, the representation of male and female characters on covers is not statistically related to sales. Similarly, no statistically significant relationship with sales can be found for violent cover imagery.

However, the situation is different for sexualized depictions. For sexualized cover images, a regression coefficient of -0.190 is estimated to be statistically significant (5 percent level) in the entire sample, implying a decrease in sales of about 17 percent. It is also interesting to note that the coefficient for sexualized cover images is also estimated to be insignificant (1 percent level) in the subsample estimate for the years 2010 to 2021. The sign is negative in this estimate as well. Since the variable is not significant in any of the other subsample estimates, these results suggest that there might have been a structural change in demand behavior or preferences over the past decade.

Prior to the analysis, it was suspected that the covers of older game titles in the sample might be more sexualized than the covers of newer ones. This conjecture is supported by the general increase in

sexualization of media advertising beginning in the 1980s and 1990s (Graff et al., 2013; Stankiewicz & Rosselli, 2008; Merskin, 2004). Descriptive analysis of the game covers examined in this study also shows an increase in sexualized depictions during this period (Figure 1). In this context, it is interesting to note that the trend of using sexual imagery does not decrease over time. Thus, newly released games continue to be heavily advertised with sexualized portrayals on the covers. Against this background, the results of the regression estimates appear in a different light. This is because the sexualization variable was estimated to be negative and statistically significant only in the sub-sample from 2010 to 2021. The results of the analysis thus possibly indicate that sexualized advertising is no longer perceived as contemporary today, which leads to a negative sales effect in the estimates.

To further explore alternative mechanisms and contexts, Table 4 shows the interactions of the sexualization variable with different game genres (see also Figure 2). Among the interactions with action, sports, role-playing and other games (consisting of less popular titles such as puzzle, miscellaneous, simulation, and strategy), only the latter two genres show significant interactions (both at the 5 percent level). However, the sexualization variable loses its significance in both cases, which indicates that the main effect of sexualized covers on sales is not relevant. Rather, the impact on sales is evident through interaction in the genres of the games.

For role-playing games, the sign of the estimated interaction is negative. From a theoretical point of view, these results are plausible, as games in this category require a strong identification with the game character. So excessive sexualization can

Table 2: Correlations and Descriptive Statistics

Panel A: Correlations										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) Ln(North America Sales)	1.00									
(2) User Rating	0.25***	1.00								
(3) Male Character	0.06	0.09**	1.00							
(4) Female Character	-0.01	0.01	0.19***	1.00						
(5) Violence	0.08**	0.15***	0.36***	0.11***	1.00					
(6) Sexualization	-0.07*	0.02	0.16***	0.42***	0.29***	1.00				
(7) Action Games	0.10**	0.10**	0.22***	-0.04	0.55***	0.03	1.00			
(8) Role-Playing Games	-0.06	0.07*	-0.06*	0.18***	0.00	0.07*	-0.30***	1.00		
(9) Sports Games	-0.13***	-0.02	0.06*	-0.09**	-0.22***	0.04	-0.44***	-0.24***	1.00	
(10) Other Games	-0.01	-0.25***	-0.10**	0.14***	-0.25***	-0.05	-0.28***	-0.15***	-0.22***	1.00

Panel B: Summary Statistics				
	Mean	Median	SD	VIF
(1) Ln(North America Sales)	0.08	0.05	0.95	
(2) User Rating	8.07	8.3	1.08	1.23
(3) Male Character	0.63	1	0.48	1.35
(4) Female Character	0.20	0	0.40	1.56
(5) Violence	0.36	0	0.48	2.12
(6) Sexualization	0.12	0	0.32	1.57
(7) Action Games	0.36	0	0.48	4.01
(8) Role-Playing Games	0.14	0	0.35	2.41
(9) Sports Games	0.26	0	0.44	3.04
(10) Other Games	0.12	0	0.33	2.24

Significance levels: (*) p < 0.05, (**) p < 0.01, (***) p < 0.001.

Table 3: Estimation Results (North America Sales)

	Full sample		Sub-sample		
	1981-2021	1981-2021	2010-2021	2000-2009	1981-1999
Intercept	-2.146*** (0.271)	-1.525*** (0.444)	-0.586 (13.413)	3.384 (2.865)	-2.107 (1.151)
Time		-0.004 (0.035)	-0.027 (0.910)	-0.455 (0.262)	0.048 (0.092)
Time × Time		-0.001 (0.001)	-0.001 (0.015)	0.010 (0.006)	-0.004 (0.004)
User Rating	0.209*** (0.027)	0.203*** (0.027)	0.187*** (0.049)	0.206*** (0.039)	0.240*** (0.075)
Male Character	0.109 (0.065)	0.123 (0.064)	0.070 (0.116)	0.088 (0.092)	0.212 (0.164)
Female Character	-0.004 (0.079)	0.002 (0.064)	0.183 (0.133)	-0.092 (0.103)	-0.120 (0.305)
Violence	-0.03 (0.078)	-0.034 (0.078)	-0.200 (0.130)	-0.072 (0.117)	0.176 (0.221)
Sexualization	-0.196* (0.097)	-0.190* (0.096)	-0.443** (0.168)	-0.125 (0.131)	0.009 (0.297)
Genre Dummies	included	included	included	included	included
Publisher Dummies	included	included	included	included	included
Platform Dummies	included	included	included	included	included
N	1,013	1,013	363	496	254
R-squared	0.286	0.293	0.344	0.330	0.221
F-Statistic	10.21***	10.13***	5.34***	6.93***	2.83***

All models include genre dummies (action and shooter, role-playing and adventure, sports and racing, other games such as misc, puzzle, simulation, and strategy), publisher dummies (Activision, Atari, Bethesda, Capcom, Electronic Arts, Konami, Microsoft, Nintendo, Sega, Sony, Take Two, THQ, Ubisoft) and platform dummies (A2600, DS, X3DS, GB, GBA, GC, N64, NES, PS1, PS2, PS3, PS4, PS5, PC, PSP, SNES, Wii, WiiU, X360, XOne). Significance levels: (*) $p < 0.05$, (**) $p < 0.01$, (***) $p < 0.001$.

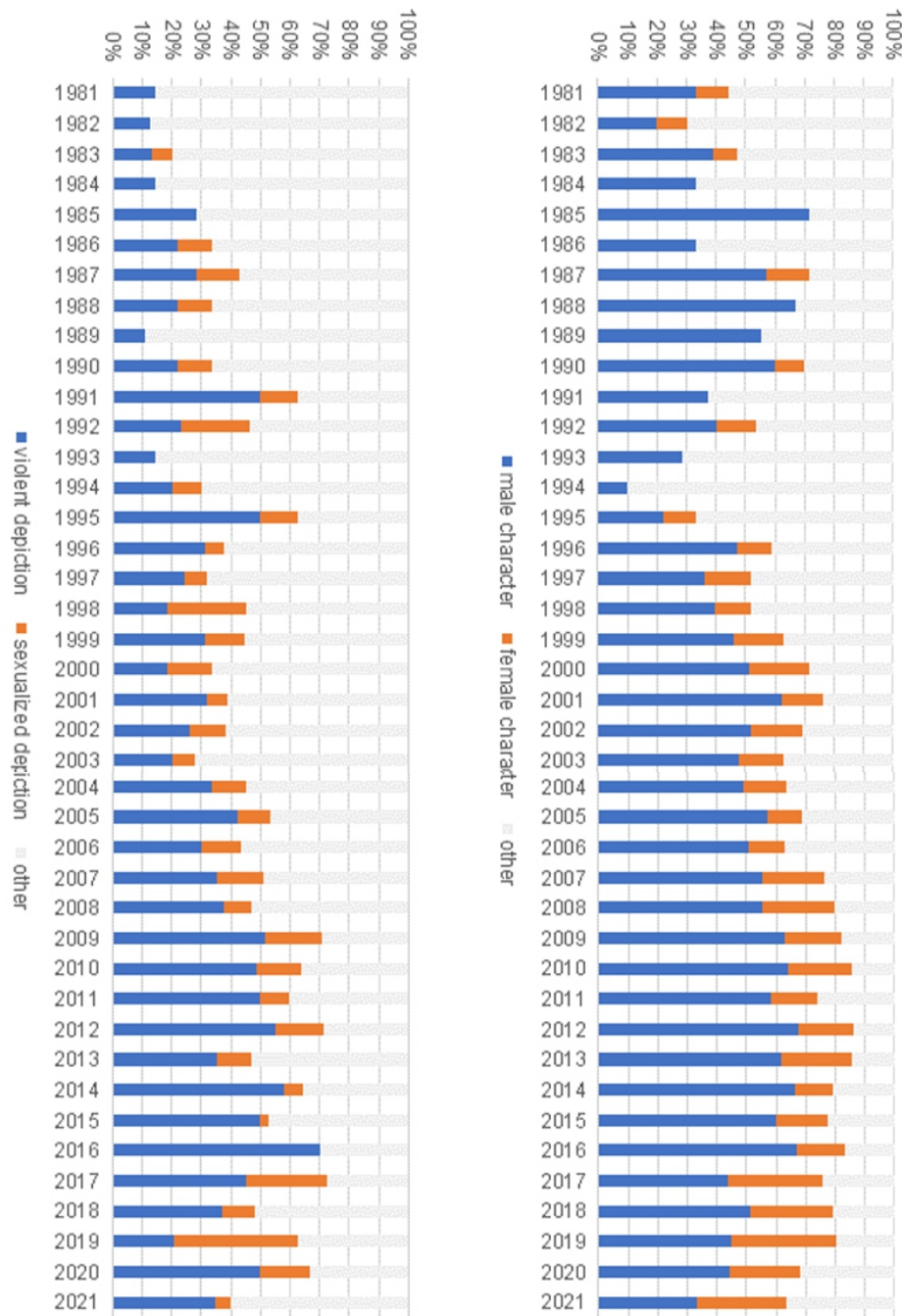


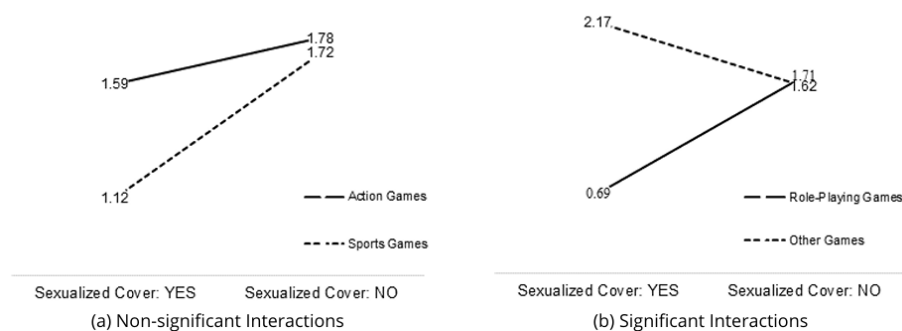
Table 4: Estimation Results (North American Sales, with Genre Interactions)

	Full sample			
	1981-2021	1981-2021	1981-2021	1981-2021
Intercept	-1.497*** (0.450)	-1.454** (0.448)	-1.487*** (0.449)	-1.445** (0.448)
Time	0.009 (0.035)	0.005 (0.035)	0.007 (0.035)	-0.010 (0.035)
Time × Time	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
User Rating	0.201*** (0.028)	0.203*** (0.028)	0.203*** (0.028)	0.195*** (0.028)

Male Character	0.074 (0.060)	0.077 (0.060)	0.075 (0.060)	0.077 (0.060)
Female Character	0.033 (0.079)	0.043 (0.079)	0.029 (0.079)	0.027 (0.079)
Violence	0.048 (0.075)	0.048 (0.074)	0.054 (0.075)	0.079 (0.075)
Sexualization	-0.081 (0.111)	-0.026 (0.103)	-0.125 (0.097)	-0.188 (0.100)
Action Games	-0.024 (0.105)	-0.048 (0.103)	-0.037 (0.103)	-0.029 (0.103)
Sexualization × Action	-0.106 (0.168)			
Role-Playing Games	-0.222* (0.111)	-0.161 (0.113)	-0.217 (0.111)	-0.212 (0.111)
Sexualization × Role-Playing		-0.464* (0.200)		
Sports Games	-0.314** (0.098)	-0.326*** (0.098)	-0.316** (0.099)	-0.297** (0.098)
Sexualization × Sports			0.0262 (0.472)	
Other Games	-0.224* (0.113)	-0.239* (0.112)	-0.219 (0.113)	-0.276* (0.115)
Sexualization × Other				0.661* (0.286)
Publisher Dummies	included	included	included	included
Platform Dummies	included	included	included	included
N	1,013	1,013	1,013	1,013
R-squared	0.274	0.277	0.274	0.277
F-Statistic	10.30***	10.48***	10.30***	10.47***

All models include genre dummies (action and shooter, role-playing and adventure, sports and racing, other games such as misc, puzzle, simulation, and strategy), publisher dummies (Activision, Atari, Bethesda, Capcom, Electronic Arts, Konami, Microsoft, Nintendo, Sega, Sony, Take Two, THQ, Ubisoft) and platform dummies (A2600, DS, X3DS, GB, GBA, GC, N64, NES, PS1, PS2, PS3, PS4, PS5, PC, PSP, SNES, Wii, WiiU, X360, XOne). Significance levels: (*) $p < 0.05$, (**) $p < 0.01$, (***) $p < 0.001$.

Figure 2: Interaction Plots of Cover Design × Game Genre



have a negative effect on purchasing demand for these games. For other games, however, a positive sign is estimated for the interaction, with the main effects being negative. This finding shows that sexualized images can potentially have a positive effect on sales if the games they advertise are generally in low demand on the market or stem from low-selling niches. The subsequent implications of this are discussed in detail below.

6. Discussion

This study was the first to investigate on a large scale how the cover design of video games affects their sales. The results of the empirical analysis are consistent with previous studies that have identified a negative sales effect of sexualized advertising for various consumer products (Gramazio et al., 2021; Lawrence et al., 2021; Lull & Bushman, 2015; Bongiorno et al., 2013). At the same time, the results of the study also extend the previous understanding of how different elements of video game covers affect consumers. In particular, it was shown that the depiction of both male and female characters on video game covers does not promote sales. The study also found no evidence of a positive sales effect of violent depictions on game covers.

In contrast, sexualized depictions have been found to negatively impact video game sales. This result is somewhat surprising, as the use of sexualized images is a widespread sales strategy in the video games industry (Gestos et al., 2018; Breuer et al., 2015; Paul Stermer & Burkley, 2012). However, the empirical findings of this study show that the sex sells strategy is not effective in the video game industry. Overall, this finding suggests that the target audience, which includes many women, has not yet been properly addressed in the video game industry.

This is especially important because the cover can give a strong first impression about the content of a game. If female characters are consistently portrayed negatively on the cover, female gamers may not bother to look beyond the cover (Burgess et al., 2007). There is also a psychological explanation for the negative sales effect. Cognitive psychology has long assumed that viewing sexualized covers requires a high level of cognitive resources, leaving little cognitive space for processing product-related information in purchase situations (Furnham, 2019; Bushman & Bonacci, 2002). Video games with sexualized covers may therefore have a sales disadvantage compared to games with more neutral cover designs. So customers may be cognitively blinded to some degree by the sexualized depictions on the covers (Lawrence et al., 2021).

Cue utilization theory served as the frame of reference for this study. In light of this theory, the results

show that the use of sexualized cues has a negative effect on videogame sales. Furthermore, the study enriches the growing body of empirical research on product cues by examining different elements of cover design. In this regard, the results provide a more differentiated picture than in previous research. For example, the findings show that it is not the depiction of female characters on the covers that has a negative impact on sales, but the use of sexualized images. Furthermore, by analyzing interaction effects with genre categories of video games, the study found that sales are particularly negative for games that require strong identification with the main character. Sexualized cover images have especially negative sales effects for role-playing games. One possible explanation for this could be that women feel devalued by sexualized depictions or simply cannot identify with such images. The industry therefore needs to focus more on the target consumer, who is often female.

Conversely, the analysis of the study also identified genres in which the sex sells strategy is effective. In particular, low-selling genres such as puzzle, miscellaneous, simulation, and strategy show a positive interaction effect with sexualized covers. Therefore, sexualized depictions can help to attract attention and catch the eye of consumers in low-selling market segments. However, it is also possible that the consumers of these games are simply better able to recognize that the sexualized cover images do not show the actual game content, but are only placed for sales purposes. Accordingly, the effect is then different because the cues are interpreted differently. Further research is therefore required to understand the specific interconnections. However, this study has taken an important first step towards identifying the relevant mechanisms.

As with all empirical studies, the reported results are subject to certain limitations. One important shortcoming of the current research is that it relies exclusively on data from the VGChartz website. Although the VGChartz data are widely used in academic research, the website has also attracted criticism in the past. In particular, it has been criticized for not indicating the origin of the data and, in some cases, for publishing extrapolations instead of actual data (Sherrick & Schmierbach, 2016). Nevertheless, VGChartz is by far one of the best data providers for the video game industry in terms of data scope and granularity (Cunningham et al., 2016; Marchand & Hennig-Thurau, 2013). However, to eliminate potential bias, it is important for future studies to replicate the results with other data sources.

Future studies could also attempt to use other metrics for market performance. In this analysis, sales was determined as the number of copies of the game sold. However, other performance indicators such as sales in US dollars or market share would also be conceivable. Another important limitation in this study arises from the manual coding of the cover images. Although manual coding is not uncommon in media research (Flynn & Harris, 2022; Shah et al., 2019), there is a risk of incorrect categorization on a subjective basis. To minimize potential bias, this study sought to ensure coding by

independent researchers.

7. Managerial Implications

The bias of the video game industry towards male consumers has been studied extensively and is well documented in research (Kuss et al., 2022; Rogstad, 2022; Naidoo et al., 2019; Fox & Tang, 2014). The findings of the present study demonstrate that the one-sided orientation of the marketing strategy towards male customers, which manifests itself primarily in the preference for violent and sexualized content and depictions, continues to be dominant. However, recent studies show that although women consume video games less intensively than men, they still represent a customer group of almost equal size (Lopez Fernandez et al., 2019; Lynch et al., 2016). Neglecting this target group in marketing can therefore have a negative impact on sales.

In fact, the results of this study suggest that the use of sexualized covers for marketing purposes is not effective. Given the dimension of the estimated negative sales effect, the video game industry would be well advised to avoid sexualized depictions and prefer neutral covers. The empirical results of this study therefore call into question the marketing logic that has long prevailed in the video game industry. The clear implication for business practice is that game manufacturers and publishers must pay more attention to the diversity of their players and that both content and advertising communication must appeal more to male and female players.

Furthermore, analysis of four decades of data shows that gendered portrayals have recently met with greater consumer disapproval, reflecting both the growing proportion of female gamers and a potentially increasing consumer awareness of gender representation issues. It is important for the video game industry to take account of these structural changes in player preferences and expectations in order to avoid excluding key customer groups and being seen as backward in the face of rapid societal change.

However, the results also show that sexualized covers have positive sales effects in some less relevant genres. It is therefore important to differentiate between customer groups and market segments when using sexualized images as a sales strategy. At the same time, the results of the analysis reveal that not enough is known about the specific segments in which the sex sells strategy can be used effectively in the video games industry. Therefore, further research is needed in this field. This study can, however, provide important insights that can be used as a starting point for follow-up research.

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RE-EVALUATING ENTREPRENEURIAL MARKETING DIMENSIONS IN THE PURSUIT OF SME INNOVATION AND GROWTH

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ABSTRACT

The relevance of Entrepreneurial Marketing (EM) dimensions in firm performance has been confirmed in many studies of a wide range of firms. EM is particularly helpful in turbulent and unpredictable business environment such as the one currently presented by the Covid-19 pandemic. There is however no consensus as to which EM dimensions are the most effective at promoting firm innovation and growth. Although many studies have used the seven dimensions proposed by Morris et al. (2002), there is a growing body of literature that points to the role of other dimensions. In this paper, we propose that in addition to the seven established dimensions, Internal Marketing Practices (IMP) can help improve our understanding of how entrepreneurial firms can achieve improved innovation and growth.

KeyWords: Entrepreneurial Marketing Dimensions, SMEs, Innovation, Growth, Internal Marketing Practice

INTRODUCTION

The Entrepreneurial Marketing (EM) concept has made a significant impact on our understanding of the performance of both small and large firms (Eggers et al., 2020; Morrish, 2011; Solé & Jones, 2013). For example, Small and Medium-Size Enterprises (SMEs) are found to benefit more from EM than their large counterparts due to their limited resources, lack of marketing knowledge and informal approach to doing business (Franco et al., 2014; Gilmore, 2011; Jones & Rowley, 2011; Morrish, Miles & Deacon, 2010). While there are a number of EM definitions, one that is widely adapted in many studies is that of (Morris, Schindehutte & LaForge, (2002, p. 5) that defines EM as “.... the proactive identification and exploitation of opportunities for acquiring and retaining profitable customers through innovative approaches to risk management, resource leveraging and value creation”.

Unlike conventional marketing practices that emphasize the satisfaction of customers' current needs and wants (Carson & Gilmore, 2000) EM is aimed at satisfying customers' current and latent needs (Chesbrough, 2010) by integrating entrepreneurial orientation and market orientation for the benefits of firms, particularly SMEs (Franco et al., 2014). Morris et al. (2002) proposed seven EM dimensions: proactiveness, opportunity focused, innovativeness, risk taking, customer centric, resource leveraging and value creation. These dimensions have been used extensively to measure firm performance with different outcomes. Although not all the dimensions were found significant in all studies, there is

sufficient evidence to suggest that all the dimensions are relevant in achieving satisfactory SME performance (Becherer, Helms, & McDonald, 2012; Sadiku-Dushi, Dana, & Ramadani, 2019). However, it is important to re-evaluate these dimensions and their impact on other aspects of business performance. The objective of this paper is to consider another potential dimension of EM that could influence SME innovation and growth.

The contribution of SMEs to the economy cannot be overemphasized. Across the world, they contribute to national income, job creation, poverty reduction, economic growth and reduction in social problems (Baas & Schrooten, 2006; Oduro & Nyarku, 2018; OECD, 2010). It is for these reasons that SMEs need to innovate and grow. Hence the need to find ways to enhance SME innovation capability and growth (Bamiatzi & Kirchmaier, 2014; Collins & Reutzel, 2017; Kahn, 2018). Lam & Harker (2015, p. 341) suggest that “if entrepreneurship is the soul of a business, marketing is the flesh”. Therefore, entrepreneurship and marketing complement each other and EM influences SME performance (Franco et al., 2014; Gilmore, 2011).

One marketing dimension that none of the EM studies have yet considered is Internal Marketing Practice (IMP). IMP is a concept that emphasizes the important role of employees and the need to treat them as internal customers (Berry, 1981; Debra & Lacono, 2015; Sasser & Arbeit, 1976). This is because, when employees (internal customers) are satisfied through effective IMP, external customer intensity which is a key dimension of EM will be enhanced (George, 1990). Furthermore, employee retention is a challenge to most SMEs (Morrish, 2009). Given this argument, it is important that IMP be explored as a potential dimension of EM. This paper argues that beyond the seven EM dimensions proposed by Morris et al. (2002), IMP should be adopted as a necessary dimension in order for firms to innovate and grow.

WHAT IS ENTREPRENEURIAL MARKETING?

Since its inception, EM has received considerable attention (Hills et al., 2008) from scholars in different business disciplines. Researchers however believe that the concept is yet to find its grounding as a research domain (Alqahtani & Uslay, 2020). This is because a majority of the literature is found in entrepreneurship journals (Hansen & Eggers, 2010). EM has been described as marketing with an entrepreneurial mindset and today, many marketing journals have published EM papers (Yadav & Bansal, 2020). One thing that is certain is that a number of experts agree that EM is the interface between entrepreneurship and marketing (Morris et al., 2002) that leads firms to achieve competitive advantage (Hills et al., 2008; Morrish et al., 2010). Like the proverbial elephant, different authors have defined EM

based on which dimensions have been investigated. Following their seminal work in 2002, many researchers have used the definition of Morris et al. (2002) as a starting point, out of which the famous seven dimensions were derived. To provide information on the different perspectives, Table 1 presents various definitions of EM. Although the list may not cover all the available definitions in literature, it provides various ‘lenses’ in looking at the EM construct.

Table 1
Definitions of EM

Author (Year)	Definition
Morris et al (2002 p. 5)	“EM is the proactive identification and exploitation of opportunities for acquiring and retaining profitable customers through innovative approaches, to risk management, resource leveraging and value creation”
Bjerke and Hultman (2004, p. 15)	“EM is the marketing of small firms growing through entrepreneurship” Four themes relevant to understanding entrepreneurial marketing within social enterprise context emerged: opportunity recognition (OR); entrepreneurial effort (EE); an entrepreneurial organizational culture (EOC) and networks and networking.”
Bäckbro and Nyström (2006, p. 13)	“EM is the overlapping aspect between marketing and entrepreneurship; therefore, it is the behavior shown by any individual and/or organization that attempt to establish and promote market ideas, while developing new ones in order to create value.”
Kraus et al. (2010, p. 9)	“EM is an organisational function and set of processes for creating, communicating and delivering value to customers and for managing customer relationships in ways that benefit the organisation and its stakeholders, and that is characterised by innovativeness, risk-taking, proactiveness, and may be performed without resources currently controlled”
Hills and Hultman (2011, p. 6)	“EM is a spirit, an orientation as well as a process passionately pursuing opportunities and launching and growing ventures that create perceived customer value through relationships by employing innovativeness, creativity, selling, market immersion, networking and flexibility.”
Ionita and Marketing (2012, p. 7)	“EM is a set of processes of creating, communicating and delivering value, guided by effectuation logic and used in a highly uncertain business environment”

Becherer et al. (2012, p.7)	“EM is the marketing processes of firms pursuing opportunities in uncertain market circumstances often under constrained resource conditions.”
Whalen et al. (2016, p.3)	“EM is a combination of innovative, proactive, and risk-taking activities that create, communicate, and deliver value to and by customers, entrepreneurs, marketers, their partners, and society at large.”
Pane Haden et al. (2016, p. 122)	“EM is the process of opportunity discovery, opportunity exploitation and value creation that is carried out by an individual who often exhibits a proactive orientation, innovation focus and customer intensity and is able to leverage relationships and resources and manage risk”.
Morrish and Jones (2020, p.90)	“EM is a configuration of activities that emerge from entrepreneur decision and actions for pursuing business objectives in stable and turbulent environments that incorporate opportunity-seeking, resource-organising and risk-accepting behavior to create multiple stakeholder value.”
Alqahtani and Uslay (2020 p.64)	“EM is an agile mindset that pragmatically leverages resources, employs networks and takes acceptable risks to proactively exploit opportunities for innovative co-creation, and delivery of value to stakeholders, including customers, employees, and platform allies”.

Source: Adapted and extended from Alqahtani and Uslay (2020) Sadiku-Dushi et al. (2019) and Sole (2013)

EM DIMENSIONS

To date, there is no consensus on the number of dimensions that constitute EM (Kilenthong, Hultman, & Hills, 2016; Sadiku-Dushi et al., 2019). This is evident in studies that have used different dimensions in measuring EM. This inconsistency notwithstanding, a number of studies have used some or all (Becherer et al., 2012; Crick, 2019; Hacıoglu et al., 2012; Morrish & Deacon, 2011; Rashad, 2018; SadikuDushi et al., 2019) seven dimensions proposed by Morris et al., (2002) to empirically investigate EM practices of firms. These dimensions include proactiveness, opportunity focus, innovativeness, risk taking, resource leveraging, customer intensity and value creation. It must be noted that other researchers have used their own conceptualization of different dimensions either based on their conceptual understanding or empirical studies.

EM research typically focuses on the entrepreneur and the external customer with little or no reference to internal customers (i.e. employees). Meanwhile, all entrepreneurial ideas are implemented through

employees and customer satisfaction is achieved through internal customers (Berry, 1981). We argue herein that IMP is a critical potential addition to the literature in terms of enhancing the power of EM-focused research. The existing and proposed dimensions of EM are discussed in more detail as follows.

Proactiveness

This dimension of the EM construct suggests that SMEs must not wait for customers to demand products and services before taking the steps to create products and services for them (Crick, 2019). In fact, this is one of the characteristics that distinguishes traditional marketing from EM. While traditional marketing emphasizes the identification of customer needs and wants to enable firms to create goods and services to satisfy those needs, EM looks beyond the current needs of customers to proactively design and create goods and services to satisfy not only their current needs but also their latent needs (Chesbrough, 2010). Proactiveness is a tool in achieving competitive advantage (Eggers et al., 2013). To reduce vulnerability to external environments, SMEs must take proactive steps to avoid the consequences of environmental turbulence (Becherer et al., 2012). As Sulistyo and Siyamtinah (2016) argue, it takes the initiative of a proactive firm to introduce a new product or service into the market. Studies have also found proactiveness as a necessary element of EM in achieving performance (Alqahtani & Uslay, 2020; Hacıoglu et al., 2012).

Opportunity Focused

Opportunity is at the heart of entrepreneurship and a major dimension of EM because opportunity is the main driving force behind most start-ups (Block & Sandner, 2009; Chu et al., 2011; Garcia-Cabrera, Garcia-Soto, & Dias-Furtado, 2018). According to Morris et al. (2002) opportunity represents unnoticed market positions that serve as a source of profit and competitive advantage. Becherer et al. (2012) argued that opportunities are critical for the success of SMEs. Other studies have found that the survival of SMEs depends on their opportunity seeking and identification (Gilmore, 2011; Morrish, 2011; Morrish & Jones, 2020). In a study of EM dimension and SME performance, Sadiku-Dushi et al. (2019) found that successful SMEs are highly opportunity focused. Mort, Weerawardena & Liesch (2012) report that opportunity is among the four strategies of EM success. Again, opportunity is seen as very relevant in social value creation (Özdemir, 2013). Growth seeking SMEs must therefore scan their environment, identify opportunities, and mobilize available and necessary resources to take advantage of the opportunities to achieve their desired growth (Morrish et al., 2010; Scarborough & Cornwall, 2011).

Innovativeness

Innovation according to the Oslo manual is the implementation of new or significantly improved products (goods or services), process, a new marketing method, or a new organizational method in business practices, workplace organization or external relation (OECD, 2005). In the entrepreneurship literature, innovation, risk management and opportunity are considered as critical success factors of any entrepreneurial activity (Miles et al., 2015).

Innovation is a capability that SMEs need to achieve sustainable growth. However, we argue that innovation is a result of innovative mindset. Moreover, firms adopting EM are encouraged to be innovative (Morris et al., 2002). Innovation may be deemed as a mindset, a process or outcome (Kahn, 2018). In this context, SMEs are expected to have innovative mindset which is different from innovation as a process or outcome. Therefore, SMEs utilizing an EM orientation should be more successful in implementing different types of innovation (implementation of new ideas) (Bachmann, Ohliles & Flatten, 2021)

Risk Taking

This refers to SMEs taking the courage to introduce product and services to the market and pursuing market opportunities even without full awareness of what the outcome will be (Morris et al., 2002). Entrepreneurial capability has been measured in prior research by a firm's ability to take risk (Sulistyo & Siyamtinah, 2016). Eggers et al. (2020) found that risk taking is among the three major dimensions that explain EM besides change-driving and bootstrapping. Entrepreneurial marketers must take calculated risks and be willing to accept some level of risk (Morrish & Jones, 2020; Scarborough & Cornwall, 2011) to achieve results. Although entrepreneurs are risk takers, they also take steps to mitigate the potential negative effect of the risk they take (Morrish et al., 2010) in order not to be devastated when things go wrong; a situation described as affordable loss (Sarasvathy, 2001).

Resource Leveraging

Leveraging refers to achieving more with less (Morris et al., 2002). One of the major challenges confronting SMEs is resource constraints (Becherer et al., 2012; Ionitã, 2012) and to address this, EM firms need to leverage their resources to achieve maximum result from limited resources available (Yadav & Bansal, 2020). As Morris et al. (2002) pointed out, firms can maximize their resources by borrowing, leasing, bartering, sharing, contracting, or outsourcing required resources. SMEs may

sometimes collaborate with their competitors to use the same resource for mutual benefit (Anwar & Daniel, 2016; Crick, 2019) and discover a source not seen by others (Becherer et al., 2012). Resource leveraging is therefore an important dimension of EM in achieving performance among SMEs.

Customer Intensity

Although Morris et al. (2002) refers to customer intensity as a dimension of the EM construct, customers are probably the pivot around which every business, whether for profit or non-profit, revolves (Kohli & Jaworski, 1990; Narver & Slater, 1990). In today's competitive business environment, where customers have become sophisticated and dictate the pace of every business activity, it will be remiss for any business to ignore the customer in their business decisions. The relevance of customer intensity as a dimension of EM cannot be overemphasized. Several studies that have used customer intensity as an EM dimension have found significant positive relationship between customer intensity and firm performance (Becherer et al., 2012; Hacıoglu et al., 2012; Morrish & Deacon, 2011; Sadiku-Dushi et al., 2019) therefore, customer centric approach to marketing is an important dimension of EM. This is also confirmed by Morrish et al. (2010) who argue that EM is both entrepreneur- and customer-centric.

Value Creation

Value creation is one of the most important factors in to every firm's survival and success. This is because the intent of every dimension discussed above is to create value for customers. Marketing is about an exchange of values (Kotler & Keller, 2009). Customers want to exchange their resources with value from the firm. Therefore, customers will always consider the benefit derived from a product or service and juxtapose that with the cost of acquiring it to determine the value (Kotler & Keller, 2009). If the benefit derived from the product or service is equal or higher than the cost of the product, value is deemed to be created but if the cost of acquiring the product or service is higher than the benefit, customers are not likely to patronize it because value is not created. Thus, it is understandable that numerous prior studies have found value creation is an important dimension of EM (Alqahtani & Uslay, 2020; Hills et al., 2008; Morrish & Jones, 2020).

Internal Marketing Practice

EM is seen as the interface between entrepreneurship and marketing (Morris et al., 2002). The literature on EM has placed much emphasis on the entrepreneur (entrepreneurial orientation) and the customer (market/customer orientation) with little or no emphasis on employees. Morrish et al. (2010) argued that

EM is not partly entrepreneurship and partly marketing but wholly entrepreneur-centric and customer-centric. They suggested four dynamic forces of EM namely: 1. The entrepreneur and customer as equally important actors at the organization's core; 2. Marketing and entrepreneurial business orientations as culture within the firm; 3. EM as a collection of strategy and processes; and 4. EM shaped by the marketing mix (Morrish et al., 2010, p. 308). While these suggestions acknowledge key elements, the role of employees has not been fully considered. The customer-centric approach in marketing has often focused on external customers with very little attention to the role of internal customers (e.g. employees).

A few studies have acknowledged the importance of employees as a key resource (Morris et al., 2002; Morrish et al., 2010) in achieving organizational objectives but the EM literature has so far not considered the satisfaction of the internal customer as a critical dimension in achieving EM objectives. Debra and Lacono (2015, p. 561) define internal customers as "individuals who act on behalf of the firm, such as board members, executives, managers and employees who directly benefit through financial and socio-psychological value from their contributions to the firm's value co-creation process." Internal customers may therefore refer to all those who support the organization internally to achieve its objectives but are not owners of the organisation. The concept of treating employees as internal customers was first proposed by Sasser and Arbeit (1976) but gained popularity following the work of Berry (1981) who put forward that employees should be considered as customers and their jobs as products. This view is supported by several studies that echoed the importance of satisfying the needs of internal customers who intend to satisfy the needs of external customers (George, 1990; George & Gronroos, 1989; Gronroos, 1985; Gummesson, 1987; Lukas & Maignan, 1996). The focus on employees as internal customers is referred to as Internal Marketing (IM) in the marketing literature (Berry, 1981). This concept was originally attributed to service organisations but there is abundant evidence in the literature showing that the concept of IM is applicable to all organisations including manufacturing firms (Ahmed, Rafiq & Saad, 2003; Ajayi, Odusanya & Morton, 2017 ; Al-Dmour, Al-Jweinat & Abu ElSamen, 2012; Kaur & Sharma, 2015; Wu, Tsai & Fu, 2013).

Berry and Parasuraman (1991, p. 151) defined IM as '.....attracting, motivating and retaining qualified employees through job products that satisfy their needs.' Winter (1985) sees it as aligning, educating, and motivating staff towards institutional objectives. It is also defined as "intra-organisational marketing of goods and services in order to carry out the firm's objectives and ultimately improves customer satisfaction" (Collins & Payne, 1991, p. 269). The objective of implementing IM is therefore to engage employees which has its root in human resource management (Collins & Payne, 1991; Lee & Wen-Jung, 2005). The genesis of Employee Engagement (EE) is attributed to the work of Kahn (1990,

, p. 694) who defined the concept as “...harnessing of organizational members’ selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances”. That is why George and Gronroos (1989) state that IM is a philosophy for managing an organisation’s human resources based on marketing perspective. In line with IM, Kumar and Sia (2012) argue that EE improves employee and organizational performance. They linked EE to organizational profitability, low employee turnover, business growth and bottomline success. Employee engagement inspires employees to become advocates for the organization, enhances employees’ faith in the organization, fosters sense of loyalty, creates a high-energy working environment, develops emotional connection with the organization, impacts employees’ attitude towards clients and prepares employees to become effective brand ambassadors for the company (Kumar & Sia, 2012). The essence of IM is to satisfy the needs of employees first to make them capable of satisfying external customers (Bennett & Barkensjo, 2005). In the definition of EM, Morris et al. (2002) emphasized acquisition and retention of customers through entrepreneurial and marketing orientations. If employees are the best asset of any organisation, it is equally important to recruit and retain them through effective human resource policies (Gronroos, 1990; Wu et al., 2013). This is in support of Gronroos (1985) who pointed out that external customer orientation is at the heart of internal customer orientation because satisfying the needs of internal customers motivate them to satisfy the needs of external customers. This is aptly demonstrated by the service-profit chain model developed by Heskett et al. (1994). They argued that, internal marketing drives employee satisfaction which drives employee productivity which drives value delivery to customers which drives customer satisfaction and eventually drives profitability through customer loyalty (Heskett et al., 1994).

IMP therefore goes beyond acknowledging employees as a resource that can be leveraged in achieving entrepreneurs’ business goals (Morrish, 2009). It encapsulates among other things, training and development of employees, effective internal communication, appraisal and feedback, employee motivation, customer orientation and satisfaction, inter-functional co-ordination and integration, and management support (Kanyurhi & Bugandwa Mungu Akonkwa, 2016). In other words, employees cannot just be used as tools in achieving EM objectives but must be seen as integral part of the EM dimensions in achieving organizational objectives (Debra & Lacono, 2015). IM employs marketing-like tools and activities in treating employees as customers to achieve desired outcomes (Ahmed et al., 2003; Gronroos, 1985). Acknowledging the importance of IM, Kotler and Keller (2009) assert that a holistic marketing constitutes four components including relationship marketing, integrated marketing, internal marketing and social responsibility marketing. From this perspective we can say that EM cannot be complete without the practice of IM. Another reason why the implementation of IM is important particularly for SME is the fact that some entrepreneurs complain about employees’ retention

being a major challenge to their businesses. This is probably because the visions of entrepreneurs are achieved through employees (Morrish, 2009) therefore without engaging these employees through effective IM practice, they may exit the business at the time that they are needed most. Furthermore, Wallace and Trinko (2006) noted in Mani (2011) that, implementation of IM helps employees to be engaged during hard economic conditions and turbulent times. This is particularly relevant because EM is also found to be useful in unstable business environments (Eggers & Kraus, 2011; Morrish, 2009; Yadav & Bansal, 2020).

Many scholars that have contributed to the EM literature agree with Vargo and Lusch (2010) that customers are value co-creators and value beneficiaries (Morris et al., 2002; Debra & Lacono 2015). When the needs of employees are satisfied and they create value for external customers, they become beneficiaries of value for having not only their financial needs but also their psychological and emotional needs satisfied (Kahn, 1990). Employees are usually used for delivering value but when well engaged, employees can also patronize the services of the organisation and serve as advocates just as the external customers do (Debra & Lacono, 2015). IMP is therefore as important as customer intensity in the EM dimensions. Conduit and Mavondo (2001) also argue that internal customer orientation is important for the development of market orientation. Based on these collective arguments, it is therefore reasonable to conclude that holistic EM is entrepreneur-centric, internal-customer-centric and external-customer-centric. IMP should therefore be considered as an additional EM dimension. Doing so should provide researchers a more comprehensive way to assess the impact of entrepreneurial marketing on the innovation and growth of SMEs.

EM DIMENSIONS, ANTECEDENTS OF SME INNOVATION AND SME GROWTH

Innovation

In today's competitive business environment, innovation has become an indispensable resource in every organisation's toolbox. In this section the concept of innovation as a business capability is explored to provide theoretical basis for innovation as an outcome of EM dimensions. According to McCormick and Maalu (2011) cited in Oduro and Nyarku (2018, p. 12) innovation constitutes "product or process, continuous or discontinuous, radical or incremental innovations leading to improved or new products." Again, following an extensive literature review of 60 definitions of innovation, Baregheh, Rowley & Sambrook (2009, p. 1334) concluded that innovation is "... a multi-stage process whereby organisations transform ideas into a new/improved product, service or processes, in order to advance, compete, and differentiate themselves successfully in their marketplace". Innovation is different from

creativity. While creativity is thinking something new, innovation is doing something new (Scarborough & Cornwall, 2011). Innovation is therefore not just an idea or invention (Schumpeter, 1934) but the implementation of something new. This study adopts the definition of the Oslo manual that "...innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations" (OECD, 2005, p.46). From the above definitions it can be observed that there are two major attributes that run across all the definitions. That is: 1. Innovation constitutes some degree of novelty (newness) and 2. Innovation aims at delivering value.

It must be noted that although innovativeness is considered as an important dimension of EM (Morris et al., 2002), this conceptualization is different from innovation as a capability. While innovation is considered as one of the dimensions of EO (Morris et al., 2002) Collins and Reutzel (2017) found that EO is not enough when considering firm investments in innovation. Investment in innovation by top management of SMEs is influenced among other things by the attractiveness of the innovation opportunity and the value to be derived from the investment (Collins & Reutzel, 2017). Innovation is also categorized as an outcome, a process or a mindset (Kahn, 2018). Innovativeness is a mindset which refers to the internalization of innovation among all the members of the organization as a culture to achieve stipulated objectives. This is what innovativeness as a dimension of EM refers to (Morris et al., 2002). On the other hand, innovation capability is an outcome which emphasizes an output such as product, process, supply chain, marketing, organizational and business model innovations among others (Kahn, 2018). Organisations that possess innovation capabilities has a greater chance of improving their performance (Najafi-Tavani et al., 2018; Oduro & Nyarku, 2018; Tarraço et al., 2019). Thus, innovativeness is a mindset and a culture, which can contribute to improvements in innovation performance as a process or an outcome.

EM AND SME INNOVATION

Several studies have measured the impact of EM on different outcome variables. However, very few studies have considered the effect of EM dimensions on innovation or use innovation as mediating variable in the relationship between EM and other outcome variables (Bachmann et al., 2021). This study however argues that SMEs can leverage EM dimensions to achieve innovation performance. Kocak, Carsrud & Oflazoglu. (2017) in a study of EM and born global performance found that EO and MO positively relate to innovation and through innovation. Therefore born global firms that deploy EO and MO dimensions as a strategy will achieve global performance positively. This is confirmed by Boso,

Cadogan & Story, (2012) who found positive relationship between EMO and product innovation success. Hacioglu et al. (2012) examined the effect of firm's EM practice and firm's innovative performance and found that proactiveness, innovativeness, customer intensity and resource leveraging dimensions of EM positively influence innovation performance of SMEs. Whalen et al. (2015) used radical new product development as a mediating innovation capability to establish positive relationship between EM and competitive advantage. Other studies have used innovation as outcome of EM practice and innovation as mediating variables to achieve performance. (Ahmadi & O'Cass, 2015; Arunachalam et al., 2018; Hendijani Fard & Seyyed Amiri, 2018; Jalilvand et al., 2017; Kocak et al., 2017; Liu et al., 2017; Mansour & Barandas, 2017; Sulistyo & Siyamtinah, 2016). IMP has also been found as a source of competitive advantage (Karami, Jones & Kakabadse, 2008). It enhances customer satisfaction and improves innovation and growth (Damanpour, 1991; Good & Michel, 2013; Lin & McDonough III, 2011; Raisch et al., 2009; Tajeddini, 2011). Jalilvand et al. (2017) in a study of internal marketing and entrepreneurial orientation on innovation found that internal marketing is a key determinant of entrepreneurial orientation and innovation in family businesses.

Measures of innovation differ among scholars. These included incremental and radical innovation (Kocak et al., 2017), the four types of innovation recommended by the Oslo manual (Dziallas & Blind, 2019; Liu et al., 2017; Sulistyo & Siyamtinah, 2016) new product development (Whalen et al., 2015), and business model innovation (Azari et al., 2017; Mansour & Barandas, 2017). Recently, based on a survey data of 146 new ventures in Germany B2B sector, Bachmann et al. (2021) found significant positive relationship between EM dimensions and innovation. Their study further shows that, the effect of EM dimensions was higher on exploitative (incremental) innovation than exploratory (radical) innovation (Bachmann et al., 2021, p. 95). Although different innovation types and modes have been used as outcome of EM dimensions, there is evidence that EM dimensions including IMP influence innovation performance.

EM AND SME GROWTH

Organizations, whether large or small, aim at achieving desirable levels of performance. One major performance indicator for most businesses is growth. The benefits of entrepreneurial marketing to SMEs are evident, as several studies have demonstrated the efficacy of EM dimensions on SME performance (Altinay et al., 2016; Eggers et al., 2018; Sadiku-Dushi et al., 2019; Solé & Jones, 2013). Eggers and Kraus (2011) found that a combination of customer orientation and entrepreneurial orientation to cut operational cost as well as focus on the customer are relevant in achieving survival and growth of SMEs in hard economic conditions. Although what constitutes growth may differ across

studies, the majority generally measures growth in terms of market share, employee growth, sales growth, financial growth, and asset growth (Altinay et al., 2016; Becherer et al., 2012; Eggers et al., 2020; Sadiku-Dushi et al., 2019). Results using these indicators however have been mixed. In a comparative study of US and UK technology firms, Jones, Suoranta & Rowley (2013) found positive correlation between EM dimensions and growth of the firms although higher growth was achieved in US technology firms than UK technology firms. Eggers et al. (2013) examined the implications of customer orientation (CO) and entrepreneurial orientations (EO) for SME growth in Austria and reported positive relationship between EO and SME growth but negative relationship between CO and SME growth. Altinay et al. (2016) explored the interface between organizational learning capability, entrepreneurial learning, entrepreneurial orientation, and SME growth among 350 SMEs in Northern Cyprus. They found that although EO did not lead to employment growth, EO positively influence higher growth in sales and market share (Altinay et al., 2016, p. 884). In a quantitative study of 174 SMEs, Becherer et al. (2012) examined the effect of EM dimensions on outcome goals. The study found that EM dimensions either in combination or individually, positively influence the overall performance of SMEs. However, with regards to growth goals specifically, the only dimension that positively influence growth was the value creation dimension of EM (Becherer et al., 2012, p. 13). Using evidence from Social Networks, Eggers et al. (2017) explored technologies that support marketing and market development in SMEs. The result shows that EO positively relates to social network usage by SMEs and although there was no direct relationship between social networking and SME growth, social network positively mediate the relationship between EO and SME growth. In a similar study of EO and SME growth, Moreno and Casillas (2008) found indirect positive relationship between EO and SME growth. Their study shows that innovation dimension of EO made the most significance influence on SME growth (Moreno & Casillas, 2008, p. 524). In a study of ethnic minority entrepreneurs operating online businesses in the UK, Anwar and Daniel (2016) also found positive relationship between resource leveraging dimension of EM and SME growth.

With regards to the appropriateness of considering IMP as a dimension of EM, Owusu-Frimpong and Martins (2010) found that most SMEs in Ghana do not regard employees as customers but few of them who practice IM achieved growth in terms of profitability and sales growth. Ajayi et al. (2017) examined employees' ambidexterity and employee engagement among SMEs in manufacturing and services sector in Nigeria. Their result concluded that SMEs with the appropriate organizational contexts for employee ambidexterity and employee engagement will increase their potential for growth and survival. In another study of employee engagement and its impact on performance, Bedarkar and Pandita (2014) argued that, organisations and their employees depend on each other therefore continuous employee engagement will positively impact on employee performance which directly

affect organizational performance (Bedarkar & Pandita, 2014). Ndubisi and Ndubisi (2013) found that sustainable IM and internal customer motivation achieved competitive advantage among SMEs in Africa. Kanyurhi and Bugandwa Mungu Akonkwa (2016) found that although there was no significant relationship between employee satisfaction and perceived organizational performance, there was significant positive relationship between internal marketing and perceived organizational performance in microfinance institutions in DR Congo. In quantitative study of 504 manufacturing and service companies, Ahmed et al. (2003) found that committed top management support as well as integrated effort towards inter-functional co-ordination are strong and critical IM factors for achieving business performance. As indicated earlier, studies on EM and SME growth have mixed results; however, the studies above clearly show that either collectively or individually, dimensions of EM including IMP have positive effect on SME growth.

CONCLUSION AND RECOMMENDATION

The objective of this study was to re-evaluate EM dimensions and how researchers go about assessing their impact on SME performance. A review of EM studies revealed that the seven dimensions of EM proposed by Morris et al. (2002) have either individually or in combination with other dimensions had significant positive effect on firm performance. Although there is no consistency in which dimensions have higher impact on firm performance, evidence from the reviews suggest that they are useful in improving performance of all businesses especially SMEs (Jones & Rowley, 2011). This paper postulates an inclusion of IMP in the EM dimensions. Employees are integral part of every organisation's survival and success. Therefore, practicing internal marketing will go a long way in improving the performance of firms, particularly SMEs.

Literature reviewed in this paper has demonstrated mixed results when assessing the typically used EM dimensions on firm performance. We argue that researchers in the entrepreneurial marketing domain should consider IMP as an EM dimension when considering the effect on firm performance. The paper also recommends further investigation to establish the validity of IMP as a dimension of EM in addition to the other dimensions have been validated by different authors as effective scale for measuring EM (Becherer et al., 2012; Eggers et al., 2017; Eggers et al., 2013; Sadiku-Dushi et al., 2019). The Covid-19 pandemic has exposed many SMEs to hard and unpredictable conditions that will require the adoption of entrepreneurial marketing to survive. SMEs should embrace the multiple dimensions of EM to adapt and respond to difficult periods and ongoing competitive challenges.

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