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Cleaner production practices at company level enhance the desire of employees to have a significant positive impact on society through work

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A B S T R A C T

Implementation of cleaner production practices (CPP), service quality (SQ) and corporate social responsibility (CSR) is often studied at organizational level. A number of studies on trio have reported it’s significant impact on overall organizational performance and profitability across the globe. However, not much is studied about the individual level micro influence of these constructs on employee engagement (EE), organizational pride (OP), organizational identification (OI) and “desire to have a significant impact through work” (DSIW). Therefore, this study presents a comprehensive framework for assessing the impact of the implementation of CPP, SQ and CSR on EE, OP, OI and DSIW. Data collected from 320 non-managerial staff members employed at a garments manufacturing company in Pakistan was analyzed using partial least square (PLS) approach. Findings revealed that the implementation of CPP, SQ and CSR plays an important role in shaping EE, OP, OI and DSIW in the garments manufacturing industry. Further, it is found that the implementation of CPP has a non-significant impact on SQ. Additionally, results of the importance-performance map analysis (IPMA) have also confirmed that the implementation of CPP at company level has shown a highest importance and performance amongst all the latent constructs proposed as predictors of DSIW in the garments manufacturing industry. These findings are a step forward and unique contribution of this study in the domain of CPP, SQ, CSR, EE, OP, OI and DSIW.

1. Introduction

Cleaner production practices (CPP) refer to “continuous application of an integrated preventive environmental strategy to processes, products, and services, to increase overall efficiency, and reduce risks to humans and the environment” (UNEP, 2006, p. 3). This comprehensive definition of CPP has clearly highlighted it’s adamant connection with both intangible (i.e. services) and tangible (i.e. finished goods) products. As an old saying goes, “prevention is better than cure” (Cobbett, 1918, p. 16; Ryan, 1938, p. 121). In this regard, Fresner (1998a, p. 171) notes that the implementation of CPP refers to the “preventive strategy to minimize the impact of production and products on the environment” (Fresner, 1998a, p. 171). Instead of focusing on the end of the pipe environmental protection measures, implementation of CPP concentrates on the simultaneous preventive measures for stopping emissions at their very selfsame source (Fresner, 1998a; Yüksel, 2008). It is a universally putative fact that every human activity (i.e. whether it be food growing, electricity generation or garments manufacturing in our case etc.) has a possibility of releasing some amount of undesired specks/pollution in the environment (Bao et al., 2016; Dominioni et al., 2020; Gurram et al., 2019; Lee et al., 2019; Qadri and Faq, 2020; Society, 2019; Zou et al., 2020). Garments manufacturing industry is not an exception, as it is considered among those industries, aftermaths of which are greatly hampering our ecosystem around the globe (Belzagui et al., 2019; Chen et al., 2017; Saratale et al., 2020). Among all the known sources responsible for snowballing world over environmental pollution, garments manufacturing companies are majorly responsible for toxic wastes in the shape of effluence fumes and emission of greenhouse gasses (Haji and Naebe, 2020; Rather et al., 2019; Saratale et al., 2020).

In recent past, many academicians (e.g. Becerra-Guevara et al., 2020; Cesar da Silva et al., 2021; Jasti and Kodali, 2016; Kafuku,
2019; Neves et al., 2018; Ūnal and Bilget, 2020; Yin et al., 2021) have proposed the usefulness of lean manufacturing principles in the textile manufacturing industry. However, we argue that lean manufacturing principles are primarily grounded on the philosophy of maximizing productivity by minimizing the ordeal of industrial waste (Botti et al., 2017; Cortez et al., 2020; Maia et al., 2019; Thomas et al., 2018). Furthermore, we assert that although industrial waste can be minimized by implementing the lean manufacturing principles (Andrade et al., 2020; Chauhan, 2016; Manfredsson, 2016; Shrafat and Ismail, 2019). Yet, the essence of organizational concern towards environment protection is much noteworthy in CPP (Aranda-Usón et al., 2020; Cesar da Silva et al., 2021; de Oliveira et al., 2019; Ramos et al., 2021; Scarazzato et al., 2017) which makes former significantly less industrious in terms of our environmental safeguard measures (Botti et al., 2017; Cong and Shi, 2019; Psomas and Antony, 2019; Salam and Farooq, 2020). Moreover, according to Yüksel (2008) CPP is more than a simple implementation of post-production environmental protection regulations (Cesar da Silva et al., 2021; de Oliveira et al., 2019; Frydenberg et al., 2004; Kennedy, 2020; Scarazzato et al., 2017). It goes far beyond unpretentious end of the production process measures/compliance (e.g. installing a water treatment plant at the end of bleaching process during common denim production) of the environment (Ben Hamida et al., 2018; Dalbâsi et al., 2019; Ünunof, 2020).

Rather, CPP also stands for pre-production (i.e. designing an environment friendly system layout before starting actual production process), in-production (i.e. employing environment friendly practices and methods during the production process) and post-production (i.e. services) environmental concerns (Cesar da Silva et al., 2021; Cong and Shi, 2019; Scarazzato et al., 2017; UNEP 2006, p. 3; Yin et al., 2021). Moreover, implementation of CPP also helps in concentrating on ecofriendly system layout, convention of biodegradable compounds, environmentally concerned production processes and use of recyclable materials throughout whole production process (Fresner, 1998a; Hens et al., 2018; Ramos et al., 2021; Yüksel, 2008; Zhao and Zhang, 2020). Although, choice of policies, processes and designs for production (i.e. whether it be profit oriented or environment focused) is solely made by top management at company level (Bagozzi et al., 2018; Behrens et al., 2014; DeTienne et al., 2008; Dimitratos et al., 2011). However, during whole production process employees (i.e. non-managerial staff in our case) play a critical role in implementing the on ground functional aspects of CPP (Aranda-Usón et al., 2020; Potoski and Callery, 2018; Veleva et al., 2017). As a timeworn and time-tested adage from late 19th century says that “apple doesn’t fall far from the tree” (Galman, 2020, p. 141; Gubler et al., 2017, p. 1; Hayne and Barr, 2016, p. 792; Thornberry, 2009, p. 297). Therefore, in this aspect we argue that employees are also not far-off from how their organization treats their society (i.e. with reference to organizational concern towards customer care through service quality (SQ) related efforts) and their environment (i.e. with reference to organizational CPP related efforts).

However, this novel connection between employees’ cognition, CPP, SQ and CSR implementation at company level has never been unveiled in previous CPP literature to date (Chang et al., 2010; Farooq and Salam, 2020; Latapi Aguadelo et al., 2020; Wang, 2019). For that reason, now this study aims to offer a new comprehension into the minds of employees, and it will give an opportunity to the executives and policymakers to look at the implementation of CPP, SQ and CSR with the lens of employees’ perspective. Similar to the concept of CPP and CSR, various previous studies (e.g. Ghost, 2018; Jahn and Brühl, 2019; Shabbir et al., 2016; Yadav et al., 2018) on the implementation of SQ and policy for implementing SQ at company level have studied SQ as a yardstick of firm level performance (Farooq, 2016; Farooq et al., 2018a; Rosenzweig et al., 2019; Sampaio et al., 2019). As stated earlier, employees are the ones who for being on the frontlines always take it on the chin (i.e. as they are going to actually execute practical on-ground work) whenever it comes to execute any new organizational measures/policies towards implementation of CPP, SQ and CSR at their workplace (Budnick et al., 2020; Farooq and Salam, 2020; Hayton, 2017; Hur et al., 2018; Love et al., 2020). In other words, this study is aimed to find out that how does employees comprehend and perceive the organizational efforts towards CPP, SQ and CSR at company level in the garments manufacturing industry. Moreover, a number of subject specific studies on the implementation of CPP, SQ and CSR (e.g. Anh Nguyen and Le VO., 2019; Augusto de Oliveira et al., 2019; de Oliveira et al., 2019; Farooq and Salam, 2020; Hsu and Chen, 2020; Liao et al., 2018; Ramos et al., 2021; Sinthupundaja et al., 2018) have acknowledged their distinct role in enhancing organizational performance and profitability.

In this context, this study submits that as a determinant of enhanced organizational performance and profitability, there is something fundamentally common between CPP, SQ and CSR. This commonality of essence Oliveira et al.; SQ and CSR is also further strengthened with our argument that organizational level of CPP, SQ and CSR is not and has never been to maximize the organizational profitability (Dare, 2016; Farooq and Salam, 2020; Salam and Farooq, 2020; Sennewald and Baillie, 2021). Rather, CPP, SQ and CSR have been implemented for satiating organizations’ commitment and concern towards protection of environment/ecosystem and natural habitat (i.e. through implementation of CPP), provision of care for its’ customers (i.e. through best SQ for customers) and vision for the betterment of society (i.e. through CSR) in a broader perspective (Augusto de Oliveira et al., 2019; Farooq et al., 2018a; Farooq and Salam, 2020; Rosenzweig et al., 2019; Salam and Farooq, 2020). However, recent aforementioned studies (e.g. Anh Nguyen and Le VO., 2019; Augusto de Oliveira et al., 2019; de Oliveira et al., 2019; Farooq and Salam, 2020; Hsu and Chen, 2020; Liao et al., 2018; Ramos et al., 2021; Sinthupundaja et al., 2018) portraying CPP, SQ and CSR as a tool for fostering performance and maximizing organizational profitability have somehow driven us bit off-course from their primary underlying objective of environmental, individual and social well-being perspective respectively (Anh Nguyen and Le VO., 2019; Farooq and Salam, 2020; Hsu and Chen, 2020; Liao et al., 2018; Wang, 2019). In other words, this study advocates that instead of only appreciating the off-target outcomes (i.e. profit maximization/monetary gains, organizational performance etc.) of CPP, SQ and CSR, their real benefits in terms of environmental, individual and social well-being should also be given due importance. Furthermore, underlying vividly spirited concept of civic responsibility (i.e. with the perspective of SQ and CPP) and philanthropic side (i.e. with the perspective of CSR) of these constructs is also seldom conveyed in earlier studies (e.g. Augusto de Oliveira et al., 2019; Dee, 2020; Hertig et al., 2020; Odriozola et al., 2017; Salam and Farooq, 2020; Sinthupundaja et al., 2018; Tracy et al., 2020) on the subject matter. As a result, the renunciation of primary objectives of the implementation of CPP, SQ and CSR has inevitably convulsed and led to a major fratricidal subjugation of the underlying philosophy of individual/customer care (i.e. SQ), social well-being (i.e. CSR) and environmental protection (i.e. CPP) in a broader perspective (de Oliveira et al., 2019; Farooq and Salam, 2020; Latapi Aguadelo et al., 2020; Rodrigues and Mendes, 2018; Sennewald and Baillie, 2021). Therefore, this study argues that instead of gauging the outcomes of CPP, SQ and CSR with a yardstick of monetary gains, profitability or enhanced organizational
performance, there is a sheer need to marshal the resources for enunciating the micro level impact (i.e. employees’ cognitive behavioral aspects in our case) of the implementation of CPP, SQ and CSR at company level (Farooq and Salam, 2020; Ramos et al., 2021; Salam and Farooq, 2020; Shi et al., 2021).

Although, this underlying connection between the implementation of CPP, SQ and CSR has never been explored in the context of employees’ cognitive behavioral aspects. However, by enunciating them as predictors of positive workplace behavioral outcomes with regard to employee engagement (EE), organizational pride (OP), organizational identification (OI) and “desire to have a significant impact through work” (DSIW), this study can yield various new insights of interest to policymakers and academicians in the field of CPP, SQ and CSR. As stated earlier, not much is known about the role of the implementation of CPP, SQ and CSR at company level in determining micro level, cognitive, individual behaviors at workplace (Cong and Shi, 2019; Farooq and Salam, 2020; Ghosh, 2018; Salam and Farooq, 2020; Sennewald and Baillie, 2021). Therefore, it is important to explore that, how and by what means the implementation of CPP, SQ and CSR is perceived by employees? What is the impact of the implementation of CPP, SQ and CSR on various cognitive aspects (i.e. EE, OP and OI) of employees’ workplace behavior (i.e. DSIW)? As a result, this study is intended to address following research question in a broader perspective, i.e. does CPP at company level, in the presence of SQ and CSR, enhance the desire of employees (i.e. DSIW) to have a significant positive impact on society through work? Moreover, Farooq and Salam (2020, p. 16) have also called for more comprehensive studies for exploring the impact of the implementation of CPP, SQ and CSR at company level in determining DSIW. Therefore, this study intends to explore the potential significance and impact of the implementation of CPP, SQ and CSR at company level for inducing DSIW in the garments manufacturing industry.

It is anticipated that the results derived from this study will open a new horizon for exploring and comprehending the role of the implementation of CPP, SQ and CSR at company level. Moreover, this study will highlight trio as construct of significant importance for induction of desirable individual level micro aspects of employees’ behavior at workplace (Farooq and Salam, 2020; Ramos et al., 2021; Salam and Farooq, 2020). For this purpose, a structural model is proposed in the context of CPP and SQ by extending John et al.’s (2019, 2017) work on CSR and DSIW. Opening with the elementary introduction of the subject matter, problem statement, research gap and research questions, this manuscript is structured in total six sub-sections. Manuscript starts with an in-depth introduction, followed by an extensive and subject specific critical literature review of CPP, SQ, CSR, EE, OP, OI and DSIW. Further, next section elaborates the logical connection among all constructs of our proposed structural model for articulating the underlying rational of our hypotheses development process. Moreover, research methodology is explained with coherent reasoning justifying the choice of structural equation modeling (SEM) approach for data analysis. Further, pre-analysis measures and data screening process is also elaborated in the research methodology and data analysis section. Partial least square (PLS) approach is employed for performing a rigorous analysis of our proposed structural model. Furthermore, an extensive and detailed discussion of findings is also presented after the research methodology and data analysis section. Finally, conclusion section elaborates the summarized findings of this manuscript along-with resultant theoretical contributions, prudently extracted managerial implications and major limitations, which are articulated to serve as future research directions for other scholars in this field.

2. Literature review

2.1. Cleaner production practices (CPP)

Implementation of CPP at company level is a preventive approach, which is primarily aimed to rein in the environmental menaces caused by modern industrialization (Adapa, 2018; Andrews et al., 2002; Antero et al., 2020; Costa et al., 2021; Shi et al., 2021). Implementation of CPP can be embedded throughout the product lifecycle (Aranda-Usón et al., 2020; Augusto de Oliveira et al., 2019; Jakhar, 2015) as it encompasses product design (Cui et al., 2020; de Guimarães et al., 2017), product delivery (Giannetti et al., 2008; Hens et al., 2018) and product recycling etc. (Retta, 1999; Sousa-Zomer et al., 2018; Yin et al., 2020) with an aim to minimize their communal impact on our environment (Li et al., 2019; Pazienna and De Lucia, 2020; Yusup et al., 2015). Further, Fresner (1998a, p. 171) notes that the implementation of CPP is an effort to minimize the emissions at their very self-same source, and that CPP have a preventive attitude towards environmental issues (Fresner, 1998a, p. 171). In another such contemporary study Zeng et al. (2010) have suggested a substantial impact of the incorporation of CPP on the overall organizational performance (Agyabeng-Mensah et al., 2020; Fan and Fang, 2020; Shi et al., 2021). Similarly, in recent past many academicians (e.g. Augusto de Oliveira et al., 2019; Burritt et al., 2019; Cui et al., 2020; de Oliveira et al., 2019; Giannetti et al., 2008; Kiperstok, 2000) have asserted on the importance of the implementation of CPP at company level for it’s organizational (i.e. macro level) benefits in various industries (Cesar da Silva et al., 2021; Fan and Fang, 2020; S. Lu et al., 2020; Sheng et al., 2020; Shi et al., 2021).

However, still not plentiful is known about the micro (i.e. individual level) influence of the implementation of CPP on the cognitions of workforce employed in the garments manufacturing industry (Farooq and Salam, 2020; Hens et al., 2018; S. Zhang et al., 2020). Therefore, employees’ perception and their perceived DSIW regarding the implementation of CPP at company level is yet unveiled (Farooq and Salam, 2020; Potoski and Callery, 2018; Veleva et al., 2017). Moreover, due to stakeholders’ constantly rising apprehensions towards mounting industrial pollution, environmental protection has gained a main prominence in various industries (Chen et al., 2013; Claudio, 2007; Kant, 2012; Roeck and Delobbe, 2012; Severo et al., 2015). Earlier studies on the subject matter (e.g. Boog et al., 2020; Calderon et al., 1991; Cazaudehore et al., 2019; Cui et al., 2020; Halkos and Skouloudis, 2018; Loague and Corwin, 2006; Meng et al., 2020; Wang et al., 2004; Yang et al., 2010) have also witnessed that environmental pollution has been principally linked with the industrial production across the globe. On the base of it’s source, environmental pollution is classified into two main categories (1) point source (i.e where source of pollution is known and is easily identifiable), and (2) non-point (i.e. where source of pollution is unknown or it is hard to identify) source pollution (Elmakar and Buchanan, 2020; Loague and Corwin, 2006; Society, 2019; Yang et al., 2010).

Due to its compact and curtailed nature, grounds and dregs of the point source pollution are often easily identifiable by using certain parameters (e.g. chemical oxygen demand (COD) measure) at industrial level (Boog et al., 2020; Cazaudehore et al., 2019; Meng et al., 2020). As per the United States Environmental Protection Agency (2020, 2015, 1996) point source pollution discharged from various industries is a major cause of the environmental disruption, water quality problems and air pollution around the globe (Calderon et al., 1991; Loague and Corwin, 2006; World Bank, 2020, 2019). Emissions discharged by the garments manufacturing industry are also classified as point source pollution (Loague and Corwin, 2006; Society, 2019; Yang et al., 2010). Many
academicians (e.g. Calderon et al., 1991; Cui et al., 2020; Halkos and Skouloudis, 2018; Loague and Corwin, 2006; Wang et al., 2004; Yang et al., 2010) have asserted on the need to mitigate the point source pollution (i.e. pollution from garments manufacturing industry in our case) by stopping the hazardous industrial emissions at their very self-same source. As stated earlier, CPP encompasses a broader perspective towards quelling the menacing emanations throughout whole production process (Giannetti et al., 2020; Sousa-Zomer et al., 2018; Yin et al., 2021). Moreover, it also focuses on curtailing the impact of industrial emissions (i.e. from production process and from final products as well) on our environment by reducing those emissions at their very self-same source (Fresner, 1998a; Shi et al., 2021; UNEP, 2006; Yüksel, 2008). Therefore, this study argues that CPP can be regarded as a suitable control strategy for abating point source pollution in the garments manufacturing industry (Fresner, 1998a; Li et al., 2019; Ramos et al., 2018; Wang et al., 2004; Yüksel, 2008; S. Zhang et al., 2020).

2.1.1. CPP in the garments manufacturing industry

Hazardous environmental impact of the garments manufacturing industry is an open secret and a bitter reality of our modern industrial development (Belzagui et al., 2019; Claudio, 2007; Gorman, 2020; Kant, 2012; Wang, 1998). However, widespread awareness regarding environmental issues and community pressure is now pushing garment manufacturers in the industry on the way to take various preventive measures (e.g. incorporating lean manufacturing principles and CPP etc.) to abate the environmental pollution (Hasle, 2014; Kant, 2012; Kozłowski et al., 2015; Parisi et al., 2015). In a contemporary analysis of the major causes of the industrial pollution Wang, 1999 has assessed 1500 industrial firms on the base of their cumulative COD levels derived from their plant-level data sets. On the base of his extensive analysis performed on the cumulative COD levels in different industries, Wang (1999, p. 13) has reported four major pollution intensive industries, i.e. “textile, chemical, paper and food” (Wang, 1999, p. 13). Additionally, Wang, 1999 noted that state owned plants working in the all four aforementioned sectors had a higher COD level (Wang, 1999). In this aspect, Nachiappan and Muthukumar (2010) have advocated the use of various eco-friendly and innovative techniques for reducing industrial COD level with particular reference to the textile industry. According to Kant (2012), various processes and practices involved in the fabric production (e.g. bleaching and dyeing etc.) can cause serious catastrophic and long-term threats to our environment.

Therefore, many academicians (e.g. Hasle, 2014; Hodge et al., 2011; Jakkhar, 2015; Niinimaki and Hassi, 2011; Parisi et al., 2015) have advocated the use of lean manufacturing principles for minimizing industrial waste in the garments manufacturing industry. However, lean manufacturing principles do not have much concern and apprehension towards environment protection and pollution eradication at their core creed (Botti et al., 2017; Kurdev and Beligran, 2021; Ramos et al., 2018; Singh et al., 2021; Yin et al., 2020). Therefore, Ramos et al. (2018) have advocated the application of lean and clean production (LCP) which is a somewhat novel concept (Siriban-Manalang et al., 2019; Wong et al., 2020). Moreover, in this aspect Dieste et al. (2019) and Jesemann et al. (2020) have noted that the relation between the implementation of lean manufacturing principles and it’s overall impact on environmental protection is still elusive and debatable (Bhatt et al., 2020; Kafuku, 2019; Sadiq et al., 2021; Ünal and Bilget, 2020).

Furthermore, it is a time-honored fact that lean manufacturing principles are mainly focused on minimizing the ordeal of industrial waste (de Oliveira et al., 2019; Mohan Prasad et al., 2020; Yang et al., 2015). Which is largely connected with a resolve and potential of profuse underlying tenacity to maximize the overall production (i.e. specifically proven fruitful for automotive industry) in various industries (Costa et al., 2021; Izogo and Ogba, 2015; Ramos et al., 2018; Yadav et al., 2020, Yadav and Sagar (2015). Therefore, lean manufacturing principles are different from other environmentally idiosyncratic modern concepts of green production and CPP (de Oliveira et al., 2019; Guilien et al., 2020; Gupta et al., 2018; Sutari, 2015). In this backdrop, other studies (e.g. Chauhan, 2016; Dieste et al., 2019; Jesemann et al., 2020; Ünal and Bilget, 2020) have also agreed that the impact of the implementation of lean manufacturing principles for abating environmental pollution is not clear to date (Alefari et al., 2020; Costa et al., 2021; Guilien et al., 2020; Sadiq et al., 2021).

For that reason, various scholars (e.g. Ozturk and Cinperi, 2018; Petek and GlaVIC, 2000; Rakib et al., 2017; San et al., 2018; Schaltegger et al., 2012) have recommended the implementation of CPP in the garments manufacturing industry (Taylor, 2006; Thompson and Tong, 2016; Yin et al., 2021; Yuan et al., 2013; Zhang et al., 2013). In this context, this study argues that as compared to evasive and unclear outcomes of lean manufacturing principles, CPP is an established and time-honored approach for abating the industrial pollution discharged from the garments manufacturing industry around the globe (Andrews et al., 2002; Mohan Prasad and M. S. Farooq, 2015; Yang et al., 2015; Wang, 2019). It encompasses discharge of perilous fumes in air and peroxides in the fresh water reservoirs (Albolafo et al., 2021; Kant, 2012; Meng et al., 2020; Parisi et al., 2015; Soetaredjo et al., 2021; Yazdi and Soto, 2021). However, we argue that fabric production can be less hazardous if CPP is incorporated at company level for smothering these harmful emissions from the garments manufacturing industry (Haji and Naeeb, 2020; Luo et al., 2018; Oliveira et al., 2016; Yin et al., 2020; Yüksel, 2008; Yusup et al., 2015). More explicitly, various processes in the garments manufacturing industry e.g. selection of raw material (Aminoudost and Saghafinia, 2017; Avadi et al., 2020; Daksa Ejeta et al., 2020), suppliers (Daksa Ejeta et al., 2020; Morali et al., 2016; Sela et al., 2020), cotton harvesting (Afzal et al., 2020; Sluijs and Roth, 2020; Wanjura et al., 2019), spinning (Fockink et al., 2020; Shao and Ma, 2019; Singh and Kumar, 2019), weaving (Baydar et al., 2015; El-Gohary et al., 2013; Hossain et al., 2018), dry and wet processing (Alkaya and Demirer, 2015; Fresner, 1998b; Kiran–Ciliz, 2003; Zhang et al., 2016), washing (Dumitrescu et al., 2008; Maryan and Montazer, 2013), bleaching (Baban et al., 2010; Narayanaswamy and Scott, 2001), dyeing (Al-Yousfi, 2004; Bhuiyan et al., 2018; Chen et al., 2017; Gong et al., 2018; Haji and Naeeb, 2020; Long et al., 2014; Ozturk et al., 2015, 2014; Psitsak et al., 2018; Schramm, 1998; Silva et al., 2018; Xiao et al., 2017; Yukseler et al., 2017), printing (Chen and Long, 2018; Ibrahim et al., 2015; C. Li et al., 2018; Tong et al., 2012), treatment of emissions/waste-water (Ali et al., 2016; Liang et al., 2018) and packaging/finishing processes (Ali et al., 2016; Benli and Baltiyari, 2015; Manning and Moore, 2006; Ozturk et al., 2016) can be positively abridged and streamlined with the implementation of CPP at company level (Alkaya and Demirer, 2015; de Oliveira et al., 2018; Fresner et al., 2010; Ghazinoory, 2005; Ortolano et al., 2014). Furthermore, as discussed earlier, implementation of CPP is also regarded as an efficient preventive approach for abating point source (e.g.
garments manufacturing industry (in our case) industrial pollution (Andrews et al., 2002; Cong and Shi, 2019; Cui et al., 2020; de Guimarães et al., 2017; Fresner, 1998a).

Therefore, this study submits that the importance of CPP for quelling effluences discharged by the garments manufacturing industry (i.e. categorized as point source industrial pollution) cannot be overstated (Cesar da Silva et al., 2021; Giannetti et al., 2020; Wang et al., 2021; Zhang et al., 2016). Moreover, according to Yüksel (2008, p. 556) keeping environmental concern at its core, CPP is a broad and complex multidimensional phenomenon, i.e. it encompasses "production and processes design planning, product design and logistic design" (Yüksel, 2008, p. 556). Considering this fact, implementation of CPP seems to be a more suitable strategy than the implementation of lean manufacturing principles for mitigating various environmental hazards potentially instigated by the garments manufacturing industry (Dalbaj et al., 2019; de Oliveira et al., 2019; Hodge et al., 2011; Mohan Prasad et al., 2020; Niinimäki and Hassi, 2011; Parisi et al., 2015). Furthermore, in this context de Oliveira et al. (2019) have thoroughly explored the implementation of CPP in the garments manufacturing industry. Their findings have also confirmed that implementation of CPP is substantially instrumental in achieving long-term sustainable organizational (i.e. macro level) goals in the garments manufacturing industry (de Oliveira et al., 2019; Farooq and Salam, 2020; Haji and Naebe, 2020; Ortolano et al., 2014). Further detail regarding the importance of micro (i.e. individual level) studies on the implementation of CPP at company level is presented in next section.

2.1.2. Micro-level studies on CPP

Yüksel (2008) has noted that application of CPP at company level can result in maximizing firm performance (Giannetti et al., 2020; Ortolano et al., 2014; Shi et al., 2021). As a principal actor, liable for production in the modern industrialization, firms perform an important role in the application of CPP by controlling the processes and approaches espoused in their overall production processes (Fresner, 1998a; Kiperstok, 2000; Oliveira et al., 2016; Yüksel, 2008; Yusup et al., 2015). However, in this d’etat firms are being influenced by their stakeholders (e.g. investors, shareholders, sponsors, suppliers, customers and workers) and by government regulations as well (e.g. environmental policies and laws) for adopting CPP related measures (Andrews et al., 2002; Fresner, 1998a; Laforest et al., 2013; Severo et al., 2015; Zhang et al., 2015). Although, there are some studies (e.g. de Oliveira et al., 2019; Giannetti et al., 2008; Yüksel, 2008; Yusup et al., 2015; Zeng et al., 2010) available to inform us about the positive impact of the implementation of CPP on firm performance at macro (i.e. organizational) level. However, not much is studied about the micro (i.e. individual e.g. employees in our case) level impact of the implementation of CPP (e.g. impact on customer satisfaction/employees’ workplace behavior in our case) in the garments manufacturing industry (de Oliveira et al., 2019; Farooq and Salam, 2020; Niinimäki and Hassi, 2011; Parisi et al., 2015). Despite recognizing firms as a principal actor (i.e. majorly responsible) for implementing CPP at company level, which is suggested by Fresner (1998a, p. 171); this study argues that employees (i.e. actual functional staff/non-managerial staff) are the real representation of hands who are going to in fact carryout the implementation of CPP at the company level (Farooq and Salam, 2020; Potoski and Gallery, 2018; Veleva et al., 2017).

Therefore, it is imperative to determine the micro level impact (i.e. individual level/that is employee level in our case) of the implementation of CPP in the garments manufacturing industry (Farooq and Salam, 2020; Shi et al., 2021; Veleva et al., 2017). In consideration of this point, we submit that employees play a frontline role while implementing CPP at company level (Potoski and Gallery, 2018; Veleva et al., 2017); however, their take on the implementation and impact of CPP has been grossly overlooked in previous studies (Adapa, 2018; Farooq and Salam, 2020; Matthews, 2018; Ramos et al., 2021; Yadav et al., 2020). In this context, this study argues that the mainstream and practical role of employees, which is undoubtedly very important for carrying out the on-ground implementation of CPP, needs a thorough exploration in the context of EE, OP, OI and DSiW (Hilson, 2000; Li et al., 2019; Ramos et al., 2021; Salam et al., 2019a; Salam and Farooq, 2020; Yusup et al., 2015; Zhang et al., 2015). Additionally, adding to the importance of this study Farooq and Salam (2020, p. 16) have also called for more micro level studies for ascertaining the relation between the implementation of CPP and DSiW (Farooq and Salam, 2020, p. 16). Moreover, as indicated earlier to date not much is known about the individual (i.e. micro level) influence of the implementation of CPP on the cognitive behavioral outcomes (i.e. EE, OP, OI and DSiW in our case) of employees at their workplace in the garments manufacturing industry (Adapa, 2018; de Guimarães et al., 2017; Farooq and Salam, 2020; Hilson, 2000; Retta, 1999; Scarazzato et al., 2017). For that reason, an in-depth study is required to explore these micro level cognitive behavioral outcomes (i.e. EE, OP, OI and DSiW) in our case the implementation of CPP at company level in the garments manufacturing industry. Further discussion regarding SQ and it’s importance for garments manufacturing industry is elaborated in next section.

2.2. Service quality (SQ)

As stated by Parasuraman et al. (1985, p. 42) three distinctive facets of SQ i.e. “intangibility, heterogeneity and inseparability” make it different from other aspects of a product’s quality (Parasuraman et al., 1985, p. 42). In this respect Parasuraman et al. (1988, p. 13) have noted that SQ is a “function of [the] difference between [the] service expected and [the] actual service delivered” (Parasuraman et al., 1988, p. 13). SQ has always received an ever increasing attention from a vast number of academicians (e.g. López-Ospina et al., 2021; Qiu et al., 2020; Salam and Farooq, 2020; Samen et al., 2013; Shabbir et al., 2016; Xu et al., 2020) in the field of social sciences. Moreover, many studies (e.g. Aaggia and Garg, 2010; Farooq et al., 2018a; Grönroos, 1984; Nunkoo et al., 2019; Parasuraman et al., 1985) have reported it’s positive impact on a number of encompassing desirable outcomes (e.g. customers’ loyalty, satisfaction, positive word-of-mouth, trust and re-purchase intention etc.) in various industries (Ertekin et al., 2020; López-Ospina et al., 2021; Patten et al., 2020; Shao et al., 2004; Towers and Xu, 2016). Although, SQ is considered as an inevitable integral part of majority of pre-production (e.g. stakeholder analysis, customer need assessment, market survey and dealing with prospective clients etc.) and post-production (e.g. product marketing, sales, recovery and after sales services etc.) processes (Dorai et al., 2021; Mandhani et al., 2020; Mocholi-Arce et al., 2020). Yet, during our preliminary literature review, it was observed that SQ is often congregated under the umbrella of two different sectors (i.e. service sector and manufacturing sector) across the globe (Berardino and Onesti, 2020; Dias et al., 2020; Wang et al., 2003).

Although, previous studies (e.g. Alsmadi et al., 2012; Berardino and Onesti, 2020; Brueckner and Flores-Fillol, 2020; Dias et al., 2020; Liao, 2020; Mathieu, 2001; Wang et al., 2003; Yuen and Chan, 2010) have highlighted and criticized the widening rift between service sector and manufacturing sector. However, aforementioned studies (e.g. Alsmadi et al., 2012; Berardino and Onesti, 2020; Brueckner and Flores-Fillol, 2020; Dias et al., 2020; Liao, 2020; Mathieu, 2001; Wang et al., 2003; Yuen and Chan, 2010) have been somehow stopping short when it came to outrightly
integrate and acknowledge the critical role of SQ in the manufacturing (e.g. garments manufacturing industry in our case) sector (Alsmadi et al., 2012; Berardino and Onesti, 2020; Dias et al., 2020; Lanza et al., 2021). As a result, over the period this disintegration of SQ in two different sectors (i.e. service sector and manufacturing sector) has led to an unending ordeal of poor SQ in the manufacturing sector (Berardino and Onesti, 2020; Dias et al., 2020; Rosenzweig et al., 2019). Although, in a theoretical point of view only service sector/service industry seems to be more concerned with the delivery of SQ (Lanza et al., 2021; Mandhani et al., 2020; Peng et al., 2014; Qin et al., 2010). However, this study argues that inseparable and inextricable nature of service (see Parasuraman et al., 1985, p. 42) from its origin/providers warrants a premeditated integration of SQ in the manufacturing sector (Dias et al., 2020; Ertek et al., 2020; Farooq et al., 2018a; Wang et al., 2003).

Further detailed literature review has revealed that various scholars (e.g. Abrahams, 1983; Gronroos, 1984; Haywood-Farmer, 1988; Kang and James, 2004; Leisen Pollack, 2009; Parasuraman et al., 1985; Yi and Gong, 2008) have also presented different conceptual models for integrating SQ in the manufacturing sector. Moreover, it is expected that thoroughly planned integration of SQ can help in putting an ending dot on the incessant ordeal of poor SQ in the manufacturing sector (Berry et al., 1990; Mefford, 1993; Silvestro, 1988; Voss, 1992). Therefore, this study also asserts that adamant role of SQ should be meticulously integrated in the manufacturing sector as well (Dias et al., 2020; Mandhani et al., 2020; Towers and Xu, 2016; Yoder et al., 2019). For that reason, this study has made an effort to integrate the concept of SQ with other organizational (i.e. CPP and CSR) and individual (i.e. EE, OP, OI and DSiW) level constructs in the context of manufacturing (i.e. garments manufacturing industry in our case) sector. Moreover, in recent past a substantial consideration has also been given to the dimensions and measures of SQ (Akter et al., 2013; Balaban et al., 2013; Cristobal et al., 2007; Kaatz, 2020; Li and Shang, 2019; Martins et al., 2019; Salam and Farooq, 2020; Wang and Chiu, 2011). In this aspect, Farooq et al. (2018a) and Salam and Farooq (2020) have observed that diverse measures and dimensions of SQ depend on the distinct nature of different industries.

Although, earlier studies (e.g. Akter et al., 2013; Bahia and Nantel, 2000; Cristobal et al., 2007; Octabriyantiningtyas et al., 2019; Qiu et al., 2020; Senthilkumar and Arulraj, 2011) do not have a unanimous take on the dimensions of SQ (Bahia and Nantel, 2000; Farooq et al., 2018a; Salam and Farooq, 2020; Senthilkumar and Arulraj, 2011). Yet, technical aspects of quality and functional aspects of quality are the two most definite and obvious basic aspects of SQ in any industry (Farooq et al., 2018a; Gronroos, 1984; Hou et al., 2020; Konijnendijk, 1993; Prentice and Kadan, 2019; Resende and Cardoso, 2019; Salam and Farooq, 2020). Further, Neave (1987) has noted that SQ is often relinquished for the sake of maximizing organizational profitability and short term organizational gains. In this context, this study argues that the primary objective of SQ was to gracefully serve, befit and attend customers with utmost care (Berry et al., 1983; Grove et al., 1992; Lehtinen and Lehtinen, 1982; Peng et al., 2014; Zeithaml, 1981). Hence, SQ was purely a customer focused and individual (i.e. micro level) centered approach (Berry et al., 1983; Bertrand, 1989; Cavaness and Manoochehri, 1993; Grove et al., 1992; Haywood-Farmer, 1988; Salam and Farooq, 2020). In this regard, Deming (1994, 1986) and Juran (1986, 1964) have also asserted on the role of individuals (i.e. micro level/employees in our case) and workmanship in promoting SQ at company level (Goodman et al., 1994; Juran et al., 1974; Mann, 1989; Scherkenbach, 1986).

However, driving us off course today majority of the studies on SQ (e.g. Brady et al., 2002; Farooq et al., 2018a; Hong et al., 2020; Hung et al., 2003; Rod and Ashill, 2010; Tiernan et al., 2008; Wang, 2019) are portraying it as a mere tool for maximizing organizational profitability/performance (Salam and Farooq, 2020). Acknowledging the enhanced organizational performance and profitability as an off-target benefit of the implementation of SQ at company level, this study submits that according to Bertrand (1989) and Neave (1987) this idea of promoting SQ as a mere tool for maximizing short term organizational gains is in itself a contradiction of Deming's (1986), Crosby's (1979) and Juran's (1964) fundamental philosophy of quality (Cavaness and Manoochehri, 1993; Crosby, 1996; Deming, 1994; Goodman et al., 1994; Juran, 1988; Mann, 1989; Peng et al., 2014). Hence, aforementioned studies (e.g. Brady et al., 2002; Farooq et al., 2018a; Hong et al., 2020; Hung et al., 2003; Rod and Ashill, 2010; Tiernan et al., 2008; Wang, 2019) have largely lost the plot and somehow deviated from the underlying primary objective of implementing SQ at company level (Farooq, 2016; Salam, 2020; Salam and Farooq, 2020). Therefore, this study suggests that in order to escalate the underlying philosophy of SQ implementation as per the guidelines of Deming (1986), Crosby (1979) and Juran (1964) it should be taken as a construct of individual well-being (Bertrand, 1989; Cavaness and Manoochehri, 1993; Deming, 1994; Juran, 1988). Furthermore, this study submits that rather than focusing it as a measure tool for attaining short-range profitability and short-run organizational gains, SQ implementation should be envisioned as a strategic choice in line with long-term organizational goals (Juran, 1988; Neave, 1987; Peng et al., 2014; Peterson and Barker, 1992).

Moreover, as stated earlier Deming (1994, 1986) has also advocated the role of workmanship, pride and EE for promoting intangible aspects of quality (Farooq et al., 2018a; Neave, 1987; Salam and Farooq, 2020). However, inaptly quality control managers who were responsible for implementing “company-wide quality-control” (CWQC) overlooked these intangible aspects and focused more on the physical characteristics (i.e. with regard to the quality of their products) and other somatic aspects of their products (Berry et al., 1985; Cavaness and Manoochehri, 1993; Farooq et al., 2018a; Hutchins, 1984). Therefore, SQ (i.e. intangible in nature) was grossly undermined in the garments manufacturing industry (Hutchins, 1984; Peng et al., 2014; Peterson and Barker, 1992; Salam and Farooq, 2020). Moreover, it is an established fact that mill owners/manufacturers also focus too much on the tangible aspects of their product’s quality, that in certain cases they leave all their gains on the table by not focusing enough on their SQ in the garments manufacturing industry (Cavaness and Manoochehri, 1993; Chang and Chen, 2008; Patten et al., 2020; Peng et al., 2014; Perry and Towers, 2009; Towers and Xu, 2016). Therefore, this study submits that vendng a good product without good SQ is not a long-term conceivable strategy (Brueckner and Flores-Fillol, 2020; Farooq et al., 2018a; Nunkoo et al., 2019; Peng et al., 2014; Salam and Farooq, 2020). Further discussion regarding the role of SQ implementation in the garments manufacturing industry is presented in next section.

2.2.1. SQ in the garments manufacturing industry

Manufacturing sector (i.e. garments manufacturing industry in our case) is so much focused on the physical aspects of their product quality, that it is often ill-equipped to ensure SQ during marketing, sales and after sale interaction with their customers (Cavaness and Manoochehri, 1993; Gronroos, 1982; Mann, 1989; Peng et al., 2014; Scherkenbach, 1986; Shafiq et al., 2019). Therefore, proponents of quality (e.g. Cavaness and Manoochehri, 1993; Farooq et al., 2018a; Hutchins, 1984; Peterson and Barker, 1992; Salam and Farooq, 2020) have emphasized on the prominence of CWQC. The concept of CWQC is easy to implement in the manufacturing sections of any company; however, due to
intangible nature of services, SQ as a part of CWQC is much difficult
to ensure (Cavaness and Manoochehri, 1993; Hutchins, 1984;
Peterson and Barker, 1992). As stated earlier, when it comes to SQ in
the backdrop of it’s heterogeneous and intangible nature, delivery
of good SQ is more complex in the garments manufacturing in-
dustry than the delivery of a good quality product (Abrahams, 1983;
Cavaness and Manoochehri, 1993; Crosby, 1996; Farooq et al.,
2018a; Mills et al., 2010; Neave, 1987; Peng et al., 2014; Salam
and Farooq, 2020). For that reason, Denton (1989, p. 108) notes
that “generally speaking, service is in a sorry state and consumers are
fed up with it” (Denton, 1989, p. 108). Therefore, considering the
importance of SQ in the garments manufacturing industry, in
recent past various important aspects of SQ have been studied in the
garments manufacturing industry across the globe (Patten et al.,
2020; Shao et al., 2004; Towers and Xu, 2016; Xie et al., 2010).

In this context, Towers and Xu (2016) have studied the impact of
SQ of physical distribution systems on the sourcing of fashion ap-
parels from the garments manufacturing industry of China. Simi-
larly, Xie et al. (2010) have linked various similar SQ attributes to
the distinct perspectives of medical garments’ supply chain in the
non-profit organizations. Likewise, Shao et al. (2004) have reported
that appropriate choice of garments and perceived SQ greatly in-
fluence the customers purchase intentions. Furthermore, Patten et al.
(2020) have also illustrated that the volatile nature of fashion
retailing and garments manufacturing industry is quite sensitive
and it is critically influenced by the implementation of SQ at
company level. Further, in this regard Cavaness and Manoochehri
(1993, p. 6) have noted that a customer can possibly return a sub-
standard product (e.g. a T-shirt in our case) but a poor SQ or a bad
experience instigated by insolent behavior of a salesman is very
difficult to return (Cavaness and Manoochehri, 1993, p. 6). There-
fore, it is important to explore the deep-rooted cognitive aspects
(i.e. EE, OP and DSIW in our case) of the implementation of SQ
at company level in the garments manufacturing industry (Anisul Huq
et al., 2014; Basili and Rossi, 2020; Konijnendijk, 1993; Waldinger,
1986). In this regard, this study argues that an organization’s
concern towards SQ at company level, somehow influences it’s
employees’ behavior and DSIW as well (Farooq and Salam, 2020;
Patten et al., 2020; Peng et al., 2014; Salam et al., 2019a; Towers
and Xu, 2016).

Therefore, this study argues that DSIW is a cognitive aspect
which is somehow stimulated by organization’s take on the
implementation of SQ at company level and sways employees’
desirable progressive outcomes (i.e. EE, OP and OI in our case) at
workplace in the garments manufacturing industry (Farooq and
Salam, 2020; Patten et al., 2020; Towers and Xu, 2016). In this
respect, numerous studies (e.g. Chang and Chen, 2008; Chen and
Chang, 2008; Iacobucci et al., 1996; Laksamana et al., 2013; Lam
et al., 2004; Mazursky et al., 1987; Patten et al., 2020) have asso-
ciated poor SQ with brand switching behavior. Moreover, various
other obscure and impalpable aspects of SQ in the manufacturing
industry (i.e. garments manufacturing industry in our case) are still
not fully apprehended to date (Patten et al., 2020; Peng et al., 2014;
Phuong Vu et al., 2019; Prentice et al., 2019). Therefore, this study
intends to discover the cognitive upshots of the implementation of
SQ in the form of EE, OP and OI in the garments manufacturing
industry. In this respect, many academicians (e.g. de Oliveira et al.,
2019; Farooq and Salam, 2020, p. 16; Kant, 2012; Le et al., 2019;
Paris et al., 2015; Peng et al., 2014; Wang, 2018) have also called for
further studies in the domain of SQ implementation in the context
of CPP in the garments manufacturing industry. Therefore, this
study is aimed to address the paucity of information about the
implementation of SQ at company level in the garments
manufacturing industry. For this purpose, this study submits that
organization’s commitment towards SQ implementation also
encourages it’s employees to go to a great length to deliver good SQ
with high EE, OP and OI in the garments manufacturing industry.
Further detail regarding CSR and it’s importance for garments
manufacturing industry is explained in next section.

2.3. Corporate social responsibility (CSR)

A lot has been written about the desirable outcomes of the
implementation of CSR at company level (Bekmeier-Feuerhahn
et al., 2017; Dahan et al., 2020; Farooq and Salam, 2020; Hawn
and Ioannou, 2016; Liao and Mak, 2019; Murillo and Lozano,
2006; Real de Oliveira and Ferreira, 2014; Shen and Zhang, 2019;
Tang et al., 2012; Yang et al., 2020). Various academicians (e.g.
Arena et al., 2018; Farooq and Salam, 2020) agree that the
conception of CSR dates back to 1950s, when it was first mentioned
in the Bowen’s (1953) famous book entitled “Social Responsibilities
of the Businessman”. In his book Bowen (1953, p. 6) defined the
phenomenon of CSR as “the obligations of business men, to pursue
those policies, to make those decisions, or to follow those lines of ac-
tion, which are desirable, in terms of the objectives and values of our
society” (Bowen, 1953, p. 6). Since then, many other scholars and
institutions (e.g. Aguilera et al., 2007; Aguinis and Glavas, 2012;
Carroll, 1991; Carroll and Shabana, 2010; Glavas and Kelley, 2014,
pp. 165–166; Sheehy, 2015; Silberhorn and Warren, 2007; Wan-Jan
2006; World Business Council for Sustainable Development, 1999)
have also defined CSR with some minor and basic variations of it’s
facets in the form of different traits and contexts (Farooq and Salam,
2020; Jahn and Brühl, 2019; Kolk, 2016; Mohamed Adnan et al.,
2018; Potdar et al., 2020).

However, according to Farooq and Salam (2020, p. 2) the
fundamental concept of social well-being and societal benefit has
always remained embraced in all the different definitions of CSR as
a core objective of it’s implementation at company level
(Chintrakarn et al., 2021; Kim and Lee, 2020; Popkova et al., 2021).
However, Ting (2020) has noted that CSR implementation policy of
large firms is not more than just paying a lip service to the main
philosophy of CSR (Farooq and Salam, 2020; Glozer and Morsing,
2019). In this regard, Ting (2020) further argues that in most of
the cases CSR implementation policy is designed in such a way
which is self-serving to organizations’ own corporate and
commercialization goals (Chintrakarn et al., 2021; Farooq and
Salam, 2020; Glozer and Morsing, 2019). Hence, in most of the
corporations practical application of CSR is not in harmony with the
Bowen’s (1953, p. 6) philosophy (i.e. as depicted in the aforemen-
tioned definition of CSR), which was primarily aimed to befit the
desirable societal objectives and concerns (Barbosa and de Oliveira,
2021; Farooq and Salam, 2020; Glozer and Morsing, 2019; Ting,
2020). Therefore, in the d’etat race of commercialism the feisty ele-
ments of care for “society” and the pivotal concept of social welfare,
which were a hallmark of the implementation of CSR are now lost
somewhere in-between (Farooq and Salam, 2020; Glozer and
Morsing, 2019; Liao and Mak, 2019; Ting, 2020; Yang et al., 2020).

Moreover, numerous studies (e.g. Basil and Erlandson, 2008;
Bekmeier-Feuerhahn et al., 2017; Glozer and Morsing, 2019; Gosselt
et al., 2019; Hawn and Ioannou, 2016) have noted that in the wake
of competing for market share, CSR implementation is being pub-
lized as a marketing tool for capitalizing on the organizational
goodwill (Farooq and Salam, 2020; Houghton et al., 2009; Liao and
Mak, 2019; Ting, 2020; Yang et al., 2020). For that reason, we argue
that Bowen’s (1953) concept of CSR implementation, which was
primarily intended to get on board with the organizational initia-
tives for the benefit of society, is now seen as a subtle assortment
of self-serving organizational initiatives (Farooq and Salam, 2020;
Maloni and Brown, 2006; Welford, 2004). Therefore, Glozer and
Morsing (2019) have denoted this wide of the mark between
philosophy and practical implementation of CSR as a double-talk and “hypocrisy” at company level. Despite all this deprecation on the wide of the mark between practical implementation and underly


ing philosophy of CSR it’s abiding outcomes cannot be easily annulled (Bekmeier-Feuerhahn et al., 2017; Farooq and Salam, 2020; Hawn and Ioannou, 2016; Yang et al., 2020). Therefore, in this backdrop of tough market competition being led by globalization and e-commerce, CSR implementation is still considered as a strategic foundation for gaining competitive advantage at organizational level by promoting a soft image and goodwill in the industry (Carroll, 1999; Jeon et al., 2020; Xie et al., 2019; Zaid et al., 2020). Although, importance of these organizational (i.e. macro level) benefits of the implementation of CSR cannot be denied (Ahn et al., 2019; Arrive and Feng, 2018; Benitez et al., 2020; Chen et al., 2019). Yet, there is a lot more to the individual level (i.e. also referred as micro) benefits (i.e. in the form of desired cognitive influence on employees) which can also be reaped from the implementation CSR at company level (Ghosh, 2018; Lauring and Thomsen, 2008; Lee et al., 2013; Roeck and Delobbe, 2012).

In this context, various scholars (e.g. Basil and Erlandson, 2008; Gosselt et al., 2019; Hawn and Ioannou, 2016; Sinthupundaja et al., 2018; Yoon and Chung, 2018) have emphasized on the segregation of internal (i.e. focused on internal stakeholders, e.g. employees in our case) and external (i.e. focused on external stakeholders and society) CSR related policy at company level. Further, as noted by Real de Oliveira and Ferreira (2014) CSR also influences employees’ performance by exciting expeditious workmanship and employee satisfaction at company level (Farooq and Salam, 2020; Yarram and Adapa, 2021; Q. Zhang et al., 2020). Therefore, CSR is also considered as a construct of interest for policymakers and academicians, when it comes to enhancing EE (Farooq and Salam, 2020; Hur et al., 2018; Jindo et al., 2020; Matthews, 2018; Real de Oliveira and Ferreira, 2014), OP (Farooq and Salam, 2020; John et al., 2019, 2017; Lea and Webley, 1997, pp. 325–326; Shahzadi et al., 2019), OI (Farooq and Salam, 2020; Ghosh, 2018; John et al., 2019, 2017; Rosengren and Bondesson, 2017; Shahzadi et al., 2019), trust (Ghosh, 2018; Lee et al., 2013; Shi et al., 2015; Vadav et al., 2018), citizenship behavior (Bavik, 2019; Demir, 2015; Donia et al., 2016; John et al., 2019; Lam et al., 2016; Lin et al., 2010; Tufan and Wendt, 2019; Zhang et al., 2017) and DSIW (Farooq and Salam, 2020; John et al., 2017, 2019; Jun Hao, 2019; Morgeson et al., 2013; Shahzadi et al., 2019) at company level. Thus, we also propose that the implementation of CSR can inculcate expedient workmanship behavior in the form of EE, OP and OI at company level. Further discussion regarding implementation of CSR in garments manufacturing industry continues in the next section.

2.3.1. CSR in the garments manufacturing industry

As stated earlier, precarious environmental effects on the natural resources (e.g. water contamination etc.) have become a staple of the production chin pull in the garments manufacturing industry (Belzau et al., 2019; Cotton et al., 2020; Kant, 2012; Parisi et al., 2015). For that reason, garments manufacturers have been incorporating CSR as a marketing tool for shaping the fragmented perception of their stakeholders and end users (Anh Nguyen and Le VO., 2019; de Abreu, 2015; Jammulamadaka, 2016; Lee and Lee, 2015; Metzner and Fischer, 2010; Perry and Towers, 2009; Salma, 2016). Although, garments manufacturing industry has been imparting a notable role in CSR related activities around the globe (Anh Nguyen and Le VO., 2019; Cazeri et al., 2018; Jammulamadaka, 2016; Metzner and Fischer, 2010; Perry and Towers, 2009; Salma, 2016). However, still much is yet to be discovered regarding the perceptive impact of CSR related practices in the garments manufacturing industry (Baskaran et al., 2011; Chi, 2011; Farooq and Salam, 2020; Jahn and Brühl, 2019; Jammulamadaka, 2016; Kolk, 2016; Mohamed Adnan et al., 2018; Potdar et al., 2020). In a recent study, Salma (2016) has reported the use of CSR implementation as a promoting/publicizing tool in the garments manufacturing industry of Bangladesh. According to Salma (2016) CSR is often taken as a tool for disseminating a soft image of the garments manufacturing industry in Bangladesh. Likewise, Jammulamadaka (2016) has explored the roots of CSR implementation in the Bombay based Indian textile firms. In a similar study, Abreu et al. (2012) have explored the implementation of CSR with the perspective of it’s cross-cultural impact on Brazilian and Chinese textile firms. Similarly, Metzner and Fischer (2010) have also validated the significance of the implementation of CSR in Brazilian garments manufacturing companies.

Therefore, in view of this pervasive acceptance of the significance of CSR in the garments manufacturing industry (Abreu et al., 2012; Jammulamadaka, 2016; Metzner and Fischer, 2010; Salma, 2016); it appears that in order to be equitable and globally competitive, garments manufacturing companies also have to prepare a clear roadmap for implementing CSR at company level (Baskaran et al., 2011; de Abreu, 2015; Lee and Lee, 2015; Popkova et al., 2021). Further, in this regard Anh Nguyen and Le VO (2019) have also acknowledged the positive outcomes of the implementation of CSR in the garments manufacturing companies. According to Cheng et al. (2016) the stable supply chain network in the textile sector. Furthermore, Perry and Towers (2009) have also acknowledged the influence of CSR implementation in the garments and fashion industry of United Kingdom. Similar findings are also reported by Chi (2011) in the context of Chinese garments and apparel manufacturing industry. Hence, various evidences have been reported in the earlier studies (e.g. Abreu et al., 2012; Anh Nguyen and Le VO., 2019; Baskaran et al., 2011; Chi, 2011; Jammulamadaka, 2016; Lee and Lee, 2015; Perry and Towers, 2009; Salma, 2016) which have linked the concept of CSR with the desirable organizational outcomes in the garments manufacturing industry (Farooq, 2016; Farooq and Salam, 2020; Popkova et al., 2021; Q. Zhang et al., 2020). However, aforementioned studies (e.g. Abreu et al., 2012; Anh Nguyen and Le VO., 2019; Baskaran et al., 2011; Chi, 2011; de Abreu, 2015; Jammulamadaka, 2016; Lee and Lee, 2015; Metzner and Fischer, 2010; Perry and Towers, 2009; Salma, 2016) have overlooked the cognitive facialts of the implementation of CSR on workmanship behavior in the garments manufacturing industry. Therefore, this manuscript intends to investigate the implications of the implementation of CSR with a specific reference to employees’ behavioral cognitive outcomes (i.e. EE, OP, OI and DSIW in our case) in the garments manufacturing industry.

2.4. Employee engagement (EE)

Importance of EE at workplace has been evidently acknowledged in numerous recent studies (e.g. Duraisingham et al., 2020; Duthler and Dhanesh, 2018; Farooq and Salam, 2020; He et al., 2019; Kwon and Kim, 2019; Milliman et al., 2018). According to Kahn (1990, p. 700) EE denotes to “simultaneous employment and expression of a person’s ‘preferred self’ in the task behaviors, that promote connections to work and to others, personal presence (physical, cognitive, and emotional), and active, full role performances” (Kahn, 1990, p. 700). Further, Rich et al. (2010, p. 618) have also endorsed Kahn’s (1990, p. 700) concept of EE by denoting it with “physical, emotional and cognitive involvement” at one’s workplace (Rich et al., 2010, p. 618). A number of studies on workplace performance (e.g. Chung, 2016; Corvalan, 2018; Karanges et al., 2015; O’Drioza et al., 2017; Sutherland, 2017) have confirmed that engaged employees are more creative and more productive for their organizations. According to Ramesh Kumar (2019) EE has a strong impact on organizational commitment.
Further, Albrecht et al. (2018) have suggested that working conditions and organizational climate also play a crucial role in determining EE at workplace. In this regard, Jindo et al. (2020) have affirmed that provision of exercise and recreational activities can substantially influence EE at workplace by minimizing job-related stress. Further, Lemon and Palenchar (2018) have emphasized on the importance of public relations for improving employees’ psychological well-being and EE at workplace.

However, with an ever-increasing dependence on distractive technologies maintaining EE at workplace is becoming a next to impossible thing (Farooq et al., 2017; Farooq and Salam, 2020; Jena et al., 2018; Kang et al., 2019; Ngo et al., 2020). Therefore, Rich et al. (2010) and Roberts and David (2017) have noted that most of the employees who are physically present at their workplace are not mentally involved in their job (Duraisingam et al., 2020; Farooq and Salam, 2020; Hammedi et al., 2021). In this regard, Roberts and David (2017) have noted that phubbing (e.g. scrolling mobile phone while sitting in class room/while attending a meeting with boss) is a modern challenge which gravely hinders a person’s ability to perform at workplace (Aagaard, 2020; Chotpitayasunondh and Douglas, 2018; Cohen et al., 2020). Moreover, it is often reported that managers every so often try unsuccessfully to wean their workers off phubbing at workplace (Chotpitayasunondh and Douglas, 2016; Roberts and David, 2020, 2017; Yasin et al., 2020). In this context, Kim and Gatling (2017) have recommended the use of online virtual platforms for enhancing EE and employee retention at workplace (Côté et al., 2020; Farooq and Salam, 2020; Hammedi et al., 2021; Wang et al., 2020). Further, He et al. (2014) have noted that procedural justice at organizational level also enhances EE at workplace by inculcating a feeling of parity among employees (Hammudi et al., 2021; Lee et al., 2020; Sandhya and Sulphey, 2020). In certain cases employees have to use their best judgment (i.e. requires high level of EE and decision making skills) for maximizing customer satisfaction through good SQ (Cavaness and Manoochehr, 1993; Gorman, 1999; Humphrey, 2017; Salam and Farooq, 2020). Therefore, EE also plays an imperative role in the delivery of good SQ in various major aspects of a SQ oriented business (Cavaness and Manoochehr, 1993; Marier, 2013; Petersen and Maynard, 1981; Salam and Farooq, 2020). In this regard, Potoski and Gallery (2018) have noted that peer communication also improves working condition and EE at workplace.

Moreover, according to Tsourvakas and Yfantidou (2018) EE is also influenced by the right and on time implementation of CSR at company level. Further, Nikolova et al. (2019) in their cross-legged analysis have confirmed that EE is also influenced by the presence of engaged leadership. In this regard, Farooq and Salam (2020, p. 7) have asserted that EE is an important factor for determining DSIW at workplace. Being a multi-dimensional concept EE encompasses three major dimensions, i.e. “physical, emotional and cognitive engagement” (Rich et al., 2010, p. 634). Numerous studies (e.g. Duraisingam et al., 2020; He et al., 2014; Matthews, 2018) have reported the significance of EE for organizational performance. Moreover, in this regard Cavaness and Manoochehr (1993) have noted that EE can be enhanced by maximizing employee empowerment, expanding their authority and enhancing their task breadth with proper training and in-place accountability measures (Børing et al., 2019; Petersen and Maynard, 1981; Roberts and David, 2017; Tiwari and Lenka, 2019). In a latest study Farooq and Salam (2020, p. 7) have assessed the role of EE as a mediator among CSR and DSIW. Their results have established that EE is significantly influenced by the implementation of CSR in commercial airlines (Farooq and Salam, 2020). However, still not much is known regarding the role and significance of EE in the garments manufacturing industry (Farooq and Salam, 2020; Jena et al., 2018; Kang et al., 2019; Veleva et al., 2017). Therefore, it is predictable that the results derived from this comprehensive study can offer some new comprehensions regarding the role and significance of EE in the garments manufacturing industry.

2.5. Organizational pride (OP)

OP is often documented as an important success factor for ramping-up organizational performance (Gouthier and Rhein, 2011; Kraemer and H.J. Gouthier, 2014; Lobo et al., 2020; Masterson et al., 2017; Tang et al., 2020). The concept of OP denotes to an emotional and cognitive attachment (i.e. also referred as bonding) between organization and its employees, which makes workers proud of their association with their organization (Durrah et al., 2020; Lehman and Zeiger-Hill, 2020; Men and Yue, 2019; Swenson, 1995). Many academicians (e.g. Abrash Walton, 2018; Lea and Webley, 1997, pp. 325–326; H. Lu et al., 2020; Swanson and Kent, 2017; Zhang et al., 2017) have widely acknowledged the desirable outcomes of OP, for uplifting individuals’ psychological well-being along-with enhanced organizational performance and profitability (Durrah et al., 2020; Farooq and Salam, 2020; Kraemer et al., 2020). According to Durrah et al. (2020) OP is a significant predecessor of creativity at workplace. In this context, Boezeman and Ellemers (2014) have noted that OP inculcates an element of respect and satisfaction among workers (Bogan and Dedegolu, 2020; Schaefer et al., 2020). Furthermore, Gouthier and Rhein (2011) have also acknowledged that positive workmanship behavior is an outcome of OP (Kraemer and H.J. Gouthier, 2014; H. Lu et al., 2020; Schaefer et al., 2020). Hence, individual level outcomes of OP (i.e. in the form of creativity at workplace, satisfaction and positive workmanship behavior etc.) can not be denied (Bryant, 2020; Farooq and Salam, 2020; Marier, 2013; Schumpeter, 1950). However, previously mentioned studies on the implementation of CPP, SQ and CSR (e.g. Augusto de Oliveira et al., 2019; Hung et al., 2003; Liao et al., 2018; Yoon and Chung, 2018; Zeng et al., 2010) in the domain of organizational behavior have concentrated only on their (i.e. CPP, SQ and CSR’s) performance based financial outcomes. By doing so, they have overlooked various behavioral, emotional, cognitive and psychological aspects of employees’ state of mind, which do encompass OP as well (Bogan and Dedegolu, 2020; Farooq and Salam, 2020; H. Lu et al., 2020). In this regard, Lu and Roto (2016) have presented different design strategies for enhancing OP at workplace.

Further, Lythreatis et al. (2019) have noted that participative role of top management is also very important for enhancing OP in SMEs (Lobo et al., 2020; Tang et al., 2020). Furthermore, OP also influences delivery of good SQ as it can also ramp-up customer oriented behavior at workplace (Cohen et al., 2020; Hammudi et al., 2021; Kraemer et al., 2020; Tang et al., 2020). According to Kraemer et al. (2020), customer oriented behavior is an outcome of OP, which ultimately enhances customers’ satisfaction as an outcome of good SQ. Moreover, many academicians (e.g. Brosi et al., 2018; Gouthier and Rhein, 2011; Humphrey, 2017; Kraemer and H.J. Gouthier, 2014; Lythreatis et al., 2019; Mas-Machuca et al., 2016) have agreed that employees’ emotional and cognitive state of mind (e.g. OP in our case) has a significant influence on their whole performance at workplace (Bogan and Dedegolu, 2020; Cohen et al., 2020; Farooq and Salam, 2020; Kraemer et al., 2020). According to Arnett et al. (2002) OP is often used as an internal-marketing tool because it significantly enhances employees’ satisfaction at workplace. Further, Bagossi et al. (2018) have noted that ethical/conscientious decision making and conforming to morally responsible business practices uplift OP by motivating self-conscious employees. Moreover, Jenks et al. (2010) and Ng et al. (2019) have also highlighted some prudent details regarding the implications and significance of OP. As stated by Ng et al. (2019) OP
can be instrumental in minimizing employees’ turnover intentions. According to John (2017, p. 30), OP has a direct effect on OI, and it has a mediating impact on the relation between the implementation of CSR and OI. On the other hand, John et al. (2017, p. 9) have noted that OP has a direct effect on DSiW with a mediating impact on the relation between the implementation of CSR and DSiW. These findings of John et al. (2017, p. 9) also corroborate with Farooq and Salam (2020, p. 7), who have reported OP as a mediator between the implementation of CSR and DSiW in commercial airlines. However, diverging from John et al. (2017, p. 9)’s findings of few recent studies by Shahzadi et al. (2019, p. 8) and John et al. (2019, p. 787) have suggested that OP has a substantial impact on OI, and it is a significant mediator between the implementation of CSR and OI.

Hence, these findings of Shahzadi et al. (2019, p. 8) and John et al. (2019, p. 787) coincide with the initial propositions of John (2017, p. 30); yet, they are in contradiction with the outcomes described by John et al. (2017, p. 9) and Farooq and Salam (2020, p. 7). Further, Mas-Machuca et al. (2016, p. 591) have also asserted on the importance of OP for enhancing workplace performance. In this regard, Mas-Machuca et al. (2016, p. 591) have acknowledged that OP mediates the connection among work-life balance and employees’ satisfaction. Moreover, Brosi et al. (2018, p. 362) have described that OP inculcates an attitude of being proactive at workplace. Furthermore, Brosi et al. (2018, p. 362) have acknowledged that connection among OP and proactiveness is mediated by organizational commitment. Therefore, we argue that outcomes of these aforementioned studies on OP (e.g. Brosi et al., 2018; Farooq and Salam, 2020; Jenks et al., 2010; John, 2017; John et al., 2019, 2017; Lea and Webley, 1997, pp. 325–326; Mas-Machuca et al., 2016; Shahzadi et al., 2019) are self-contradictory. Moreover, previous studies on OP were conducted in various other industries, e.g. airline industry (Farooq and Salam, 2020, p. 8), real estate industry (John, 2017, p. 33: John et al., 2019, p. 787, 2017, p. 6; Shahzadi et al., 2019, p. 5), non-profit organizations (Boezeman and Ellemers, 2014, p. 164) and multiple other service industries (Goutheir and Rhein, 2011, p. 640). Thereby, aforementioned studies (e.g. Brosi et al., 2018; Farooq and Salam, 2020; Jenks et al., 2010; John; John et al., 2019, 2017; Lea and Webley, 1997, pp. 325–326; Mas-Machuca et al., 2016; Shahzadi et al., 2019) have undermined the role of OP in promoting positive workplace behavior in the distinct nature of the garments manufacturing industry. For that reason, we submit that more studies are warranted to validate the significance of the phenomenon of OP in the garments manufacturing industry.

2.6. Organizational identification (OI)

The phenomenon of OI dates back to early 1990s when (Mael and Ashforth 1992, p. 107) first introduced it’s operationalization through self-reported data (Farooq and Salam, 2020; Knippenberg and Schie, 2000; Riketta, 2005; Vallee et al., 2020; Weng and Cheng, 2019). According to (Mael and Ashforth 1992, p. 107), OI denotes to the employees’ psychological bond (i.e. often signified as perceived oneness) with their organization (Basu and Sen, 2021; Walker, 2020). Further, Abernethy et al. (2019) and Brown (2017) have noted that OI influences numerous socio-cognitive elements at workplace (Blader et al., 2017; Boezeman and Ellemers, 2014; Demir, 2015). According to Graham et al. (2019), OI also influences ethicality at workplace. Similarly, Teng et al. (2020) have also suggested the significance of OI for ramping-up and promoting citizenship behavior and ethical/conscientious workplace behavior. Further, Chen et al. (2016) have asserted that OI has a substantial impact on moral reasoning and pro-organizational behavior (Abernethy et al., 2019; Avanzi et al., 2018). Moreover, Chevalier et al. (2019) have stated that OI has a considerable influence on the organizational commitment (Gruhl et al., 2021; Pierry and Carr, 2020). In this regard, Zagenczyk et al. (2020) and Wang et al. (2017) have described that there is a phenomenal connection between organizational support, EE, adaptability, OI and organizational commitment (Basu and Sen, 2021; Vallee et al., 2020; Walker, 2020). It means that employees with high OI consider themselves as a part of their organization (Akdogan et al., 2016; Boring et al., 2019) and organizational success is considered as their own success (Moriano et al., 2014; Rosengren and Bondesson, 2017; van Zoonen and Treem, 2019). Further, Carmeli et al. (2007) have argued that when workers identify themselves with their organization, they put extra hard-work and dedication in the tasks assigned to them at their workplace.

Many academicians (e.g. Asadullah et al., 2017; Boezeman and Ellemers, 2014; Fallatah et al., 2017; Filho et al., 2020) have linked OI with higher performance at workplace (Farooq and Salam, 2020). In this regard, Thurston and Glendon (2018) have suggested that in certain cases level of risk exposure at workplace and employee empowerment also influence OI. Moreover, Wu et al. (2016) have noted that OI also mediates the relation between ostracism at workplace and citizenship behavior. Further, Kawski and Conroy (2020) have acknowledged that OI positively influences diversity training and volunteering behavior among workforce. Therefore, it is evident from the body of research that there is an undisputed focus on the adamant importance of organizational culture and internal communication for enhancing OI at workplace. Moreover, Tarakci et al. (2018) have suggested that performance feedback also substantially influences OI (Gruhl et al., 2021; Pierry and Carr, 2020; Walker, 2020). Furthermore, according to Jones (2010) and Lu et al. (2016) OI implies that employees are emotionally attached (i.e. they ‘take pride in being a part of their organization’) with their organizations (Pierry and Carr, 2020; Vallee et al., 2020). In this regard, Liu et al. (2019) have noted that perceived justice and perceived support received from one’s supervisors at workplace can substantially enhance employees’ OI (Bogan and Dedegolu, 2020; Tang et al., 2020; Walker, 2020). Furthermore, numerous scholars (e.g. Jones, 2010; Matherne et al., 2017; Mazancieux et al., 2020) have also acknowledged that OI serves as a precursor of role-breadth, which enhances employees’ desire to stay ahead in outperforming others by assuming extra-roles at their workplace.

In this context, Moriano et al. (2014) have also acknowledged that emotional bond of OI motivates employees to contribute with their best performance at their workplace (Basu and Sen, 2021; Pierry and Carr, 2020; Tsui and Ngo, 2015; Tufan and Wendt, 2019). According to John (2017, p. 30), OI is influenced by OP and right implementation of CSR. Moreover, John (2017, p. 30) has stated that the relation between OP and OI is moderated by DSiW. On the other hand, John et al. (2017, p. 9) have asserted that OI has a direct impact on DSiW. Additionally, in this regard John et al. (2017, p. 9) have acknowledged that the nexus among CSR and DSiW is mediated by OI. These findings of John et al. (2017, p. 9) coincide with Farooq and Salam’s (2020, p. 7) recent study on commercial airlines, validating the proposition of a significant connection between OI and DSiW. However, Shahzadi et al. (2019, p. 8) have illustrated that the direct relation between the implementation of CSR and OI is moderated by DSiW. Contrary to them, Qian and Jian (2020) have reported that OI has a direct relation with organizational cynicism. Further, in this regard Qian and Jian (2020) have acknowledged that a strong mediation of OI also exists in the relation between ethical/conscientious leadership and organizational cynicism. In another study John et al. (2019, p. 787) have reported the significance of OI as a precursor of citizenship behavior (i.e. also known as employees’ voluntary commitment (Demir, 2015; Lin et al., 2010) towards organizational goals and task performance (i.e. also known as employees’ effectiveness (Borman and Motowidlo, 1997) on their job) at workplace.
However, Ertürk and Albayrak (2019) have asserted that OI is also influenced by employee empowerment and leader-member exchange at workplace (Basu and Sen, 2021; Piercy and Carr, 2020; Valle et al., 2020). In this regard, Ertürk and Albayrak (2019) have noted that the element of trust moderates the relation between OI, employee empowerment and leader-member exchange at workplace (Basu and Sen, 2021; Piercy and Carr, 2020; Valle et al., 2020). Further, disavowing all the aforesaid desirable outcomes of OI, Conroy et al. (2017) have highlighted the dark side of OI. According to Conroy et al. (2017) OI can cause identity threat at workplace, which can be instrumental in instigating an attitude of resistance towards accepting organizational change (Basu and Sen, 2021; Gruhl et al., 2021; Tang et al., 2020).

However, in this regardNeill et al. (2019) have noted that internal communication and OI have a substantial influence on organizational change. Therefore, on the base of these self-contradictory findings of various aforementioned studies on OI (e.g. Conroy et al., 2017; Ertürk and Albayrak, 2019; Farooq and Salam, 2020; John, 2017; John et al., 2019, 2017; Matherne et al., 2017;Neill et al., 2019; Qian and Jian, 2020; Shahzadi et al., 2019; Tsui and Ngo, 2015) this study argues that more studies are warranted to evaluate the significance of OI in the garments manufacturing industry. Moreover, few studies submit that the concept of OI is novice to CPP, SQ and CSR literature; therefore, it requires a thorough investigation to validate the implications of OI in the garments manufacturing industry.

2.7. Desire to have a significant impact through work (DSIW)

DSIW is also a pretty novice phenomenon and many academicians (e.g. Daly, 2018; Farooq and Salam, 2020; John, 2017; John et al., 2019, 2017; Jun Hao, 2019; Pham and Paillé, 2019, p. 265; Shahzadi et al., 2019) have highlighted the dearth of in-depth studies in this domain. The concept of DSIW does not have a very long history as compared to CSR, which can be traced back to early 1950s (Arena et al., 2018; Bowen, 1953; Farooq and Salam, 2020). Literature review has shown that the concept of DSIW was first presented by Gully et al. (2013, p. 936) when they studied the recruitment process of social and environmentally concerned employees (Farooq and Salam, 2020; Gully et al., 2013, p. 936). Since then, many other scholars (e.g. Daly, 2018; Farooq and Salam, 2020; John, 2017; John et al., 2019, 2017; Jun Hao, 2019; Morgeson et al., 2013; Pham and Paillé, 2019, p. 265; Shahzadi et al., 2019) have examined the concept of DSIW in various contexts of social sciences and human behavior. According to Morgeson et al. (2013, p. 815) the concept of DSIW is grounded on the base of Barrick et al.’s (2013, p. 134) notion of purposefulness (Barrick et al., 2013, p. 134; Farooq and Salam, 2020; Morgeson et al., 2013, p. 815). In this regard, Barrick et al. (2013, p. 134) state that all employees have an intrinsic desire to make a meaningful contribution to their society for improving the lives of others through their work (Barrick et al., 2013, p. 134; Bohns and Flynn, 2021; Farooq and Salam, 2020).

Further in this context, Barrick et al. (2013, p. 134) have also noted that DSIW is a self-driven instinct, which plays a vibrant role in imparting a positive and evocative contribution in others’ lives through respectable service delivery in the form of good SQ and upright performance at ones’ own workplace (Farooq and Salam, 2020). Furthermore, Morgeson et al. (2013, p. 815) were the first ones to link the concept of CSR with DSIW (Farooq and Salam, 2020). By doing so, Morgeson et al. (2013, p. 815) theoretically extended the previous DSIW related work of Gully et al. (2013, p. 936); however, they have not suggested any framework for validating such relation between CSR and DSIW (Farooq and Salam, 2020). Later, John (2017, p. 30) presented a conceptual framework explaining the connection between CSR, OP, OI and DSIW. He claimed that DSIW moderates the relation between OP and OI (John, 2017, p. 30). After that in another study John et al. (2017, p. 9) described the mediating impact of OP and OI among CSR and DSIW. Developing on the work of aforementioned researchers Daly (2018, p. 17) proposed a conceptual model for assessing the role of DSIW in defining a positive relationship among volunteering activities and the recruitment outcomes. Further, John et al. (2019, p. 787) suggested that DSIW also moderates the relationship among CSR and OI.

Afterwards, another scholar Jun Hao (2019, p. 11) also assessed the connection between CSR and DSIW. He argued that DSIW is also influenced by organizations’ concern towards their social and environmental responsibility, which is communicated through their messages (e.g. commercials and job advertisements etc.) at company level (Jun Hao, 2019, p. 11). Moreover, Jun Hao (2019, p. 11) also presented a model which suggests that DSIW moderates the relation between “pro-environmental job ads” and Kristof’s (1996) “person-organization fit”. Later on, in another related study Pham and Paillé (2019, p. 265) found that DSIW positively influences “green recruitment and selection” (GRS) related process at company level. Further, Pham and Paillé (2019, p. 265) suggested that DSIW also moderates the relation between “corporate environmental sustainability” (CES) and “jobseekers’ pride” (Farooq and Salam, 2020). Further, similar to the findings of John et al. (2019, p. 787), in another study Shahzadi et al. (2018, p. 8) have also confirmed the moderating role of DSIW between the implementation of CSR and OI. Developing on the aforementioned studies of John et al. (2019, 2017) in another study on commercial airlines Farooq and Salam (2020, p. 7) have proposed that along-with OP and OI, EE also mediates the relationship among CSR and DSIW (Farooq and Salam, 2020, p. 7). This comprehensive discussion on DSIW literature starting from 2013 to 2020 has confirmed that a positive and meaningful contribution imparted by daily routine job related activities creates a sense of fulfillment and achievement in the workers with conscience (Farooq and Salam, 2020).

Therefore, Gully et al. (2013, p. 936) have also noted that employees strive to find purposefulness in the concurrent activities they perform at their workplace. Attainment of meaningful and desired outcomes is not possible without completely understanding and finding purposefulness in the daily activities performed at ones’ workplace (Beadle and Knight, 2012; Bunderson and Thompson, 2009; Farooq and Salam, 2020; Minkov and Hofstede, 2011; Supanti and Butcher, 2019). Finding meaningfulness and conscience in one’s work leads to a sense of achievement, pride and self-satisfaction at workplace (Barrick et al., 2013; Farooq and Salam, 2020; Ghosh, 2018; Goh et al., 2015; John et al., 2017; Sutherland, 2017). In this regard, a number of studies (e.g. Daly, 2018; Liu and Jansen, 2017; Seitz and Farhadi, 2019; Son, 2011; van Zoonen and Treem, 2019) have acknowledged that the relation between desire, expectation, achievement and empathy is as old as is human history itself (Bohns and Flynn, 2021; Farooq and Salam, 2020; Graus et al., 2021; Klein and Shoshana, 2020; Mitchell et al., 2020; Yurtsever et al., 2021). However, DSIW is relatively new phenomenon and it has a close assimilation with Digman’s (1990) five factor model (Farooq and Salam, 2020; Vergauwe et al., 2017). Though, in recent past many academicians have employed five factor model (e.g. Guido, 2006; Vergauwe et al., 2017) and DSIW (e.g. Daly, 2018; Farooq and Salam, 2020; Gully et al., 2013, p. 936; John, 2017; John et al., 2019, 2017; Jun Hao, 2019; Morgeson et al., 2013; Pham and Paillé, 2019, p. 265; Shahzadi et al., 2019) in meaningfulness studies. However, literature review has revealed some self-contradictory findings.

For instance, as stated earlier John (2017, p. 30) suggested a moderating impact of DSIW in the connection between OP and OI. Whereas, John et al. (2017, p. 9) have reported the implementation
of CSR as a determinant of DSIW. However, later in some other studies Shahzadi et al. (2019, p. 8) and John et al. (2019, p. 787) have illustrated that DSIW is a moderator among CSR and OI. Differing from them Farooq and Salam (2020, p. 7) asserted that DSIW is determined by EE, OP and OI. Therefore, this study argues that findings of these aforementioned studies on DSIW (e.g. Daly, 2018; Farooq and Salam, 2020; Gully et al., 2013, p. 936; John, 2017; John et al., 2019, 2017; Jun Hao, 2019; Morgeson et al., 2013; Pham and Paillé, 2019, p. 265; Shahzadi et al., 2019) are all self-contradictory and warrant further comprehensive studies. Moreover, it should be noted that above-mentioned studies on DSIW (e.g. Daly, 2018; Farooq and Salam, 2020; Gully et al., 2013, p. 936; John, 2017; John et al., 2019, 2017; Jun Hao, 2019; Morgeson et al., 2013; Pham and Paillé, 2019, p. 265; Shahzadi et al., 2019) have not incorporated the impact of the implementation of CPP and SQ in determining DSIW at company level. Additionally, their outcomes cannot be generalized for the garments manufacturing industry, because their sample had no representation from the garments manufacturing industry (Farooq and Salam, 2020). Therefore, a more in-depth and rigorous study is warranted to fully understand the connection between the implementation of CPP, SQ and CSR along-with their impact on DSIW at company level in the garments manufacturing industry.

3. Hypotheses development

Although, since many decades implementation of CPP, SQ and CSR has been studied as a construct of importance for enhancing organizational performance at macro level (Augusto de Oliveira et al., 2019; Dieste et al., 2019; Farooq, 2018; Farooq et al., 2018a; Giannetti et al., 2008; Kipertok, 2000; Yüksel, 2008; Yusup et al., 2015). However, motivators and micro level outcomes of the implementation of CPP, SQ and CSR at company level are not fully known to date (Adapa, 2018; Augusto de Oliveira et al., 2019; Cui et al., 2020; Oliveira et al., 2016; Severo et al., 2015). Additionally, we propose that the implementation of CPP, SQ and CSR have much in common. For instance, SQ is implemented for the betterment of services rendered to individuals (Denton, 1989; Farooq, 2018; Farooq et al., 2018a; Furrer et al., 2000; Salam and Farooq, 2020). CSR refers to the organizational accomplishments undertaken for the benefit of society (Farooq and Salam, 2020, p. 2; Mohamed Adnan et al., 2018; Olthuis and van den Oever, 2020; Potdar et al., 2020; Xiao et al., 2019). Similar concept of individual, societal and environmental concern at the core of CPP, makes it much closer to SQ and CSR related environmental initiatives at company level (Cong and Shi, 2019; Farooq and Salam, 2020; Ramos et al., 2018; Sousa-Zomer et al., 2018; Zhang et al., 2015).

Furthermore, relationship between CPP and SQ is also evident from the aforementioned UNEP’s (2006, p. 3) comprehensive definition of CPP, which has clearly articulated the adamant connection between CPP and services (Farooq and Salam, 2020, p. 16; UNEP, 2006, p. 3). Therefore, Farooq and Salam (2020, p. 16) have also suggested that the implementation of CPP may have a wide range of potential cognitive behavioral effects on DSIW. Moreover, considering the collective concern for the betterment of society by environment friendly practices, this study asserts that the implementation of CPP can play a positive role in improving overall organizational image (Andrews et al., 2002; Augusto de Oliveira et al., 2019; Burritt et al., 2019; Giannetti et al., 2008). As stated in the aforementioned literature review section EE, DSIW, OP, OI and SQ are potentially influenced by the implementation of rightly perceived CPP related organizational activities, undertaken at company level for overall individual, societal and environmental betterment (Bagozzi et al., 2018; Bavi, 2019; Boezeman and Ellemers, 2014; Cazzeri et al., 2018; Farooq and Salam, 2020). For that reason, this study submits that it is plausible that CPP can influence EE, DSIW, OP, OI and SQ in the garments manufacturing industry. Therefore, building on the aforementioned literature review and rational opinions generated from previously mentioned studies, this study proposes following hypotheses:

**H1a.** Implementation of CPP has a positive impact on EE

**H1b.** Implementation of CPP has a positive impact on DSIW

**H1c.** Implementation of CPP has a positive impact on OP

**H1d.** Implementation of CPP has a positive impact on OI

**H1e.** Implementation of CPP has a positive impact on SQ

SQ implementation has been extensively studied for it’s role in tourism, banking, health management, airline industry, education sector and fashion industry (Aagja and Garg, 2010; Abdullah et al., 2011; Bahia and Nantel, 2000; Bellizzi et al., 2020; Farooq et al., 2018a; Gourdin, 1988; Salam and Farooq, 2020; Samen et al., 2013; Wang, 2019). Although, previous studies have explored it’s impact on customers’ loyalty, consumer perspective and overall organizational performance (e.g. Brueckner and Flores-Fillol, 2020; Farooq et al., 2018a; Salam and Farooq, 2020; Sureshchandar et al., 2002; Tsoukatos and Mastroiani, 2010); however, no study has been studied about its influence on employees’ cognitive behavioral outcomes (Côté et al., 2020; Hammedi et al., 2021; Wang et al., 2020). In a contemporary study on the emotional and cognitive facets of working behavior in hotel employees Wang (2019) has explored the concept of emotional labor for enhancing SQ. According to Wang (2019), there is a phenomenal connection between emotional labor and SQ implementation at company level (Farooq et al., 2018a; Salam and Farooq, 2020). However, still much is yet to be unveiled in terms of SQ’s role in determining EE, OP and OI (Farooq and Salam, 2020; Gruman and Saks, 2011; Macey and Schneider, 2008; Saks, 2006; Sandhya and Sulphey, 2020). For that reason, developing on the rational opinions derived from above-mentioned studies on SQ, this study suggests that the intention of providing good SQ is plausibly somehow linked with EE, OP and OI. Therefore, it is hypothesized that:

**H2a.** Implementation of SQ has a positive impact on EE

**H2b.** Implementation of SQ has a positive impact on OP

**H2c.** Implementation of SQ has a positive impact on OI

In last few years management literature has seen a rising trend of CSR implementation related studies in industrial sector across the globe (e.g. Bavi, 2019; Farooq and Salam, 2020; Kang et al., 2020; Lee, 2008; Supanti and Butcher, 2019). According to Glavas and Godwin (2013) overall perception of goodness, which is conceded through the implementation of CSR by some means influences employees’ OI at workplace. According to Farooq and Salam (2020, p. 4) OI refers to a point where employees are so much gratified, content, satisfied and attached with their organization that they themselves choose to be identified with their employer/organization and they recognize that their identity is linked with their employer/organization (Chahal and Devi, 2013; Lee, 2008; J. Li et al., 2018; Salam et al., 2019b). In this aspect, many academicians (e.g. Arnett et al., 2002; Gouhier and Rhein, 2011; Salam et al., 2019a; Swanson and Kent, 2017) have also acknowledged the connotations of OP as a potential outcome of the implementation of CSR at company level (Farooq and Salam, 2020). As stated earlier, OP refers to the sense of conceit, pride and officiousness at an individual level (Farooq and Salam, 2020; Gouhier and Rhein, 2011). Although, OP has been discussed by many academicians in the domain of social sciences (e.g. Gibson, 2016; Grandey et al., 2018;
This background, this study proposes that resembling to the garments manufacturing industry (Farooq and Salam, 2020). As indicated previously, Glavas and Godwin (2013) have reported a significant relationship between the implementation of CSR at company level and OI at individual level. Taking a step forward, some other researchers (e.g. Farooq and Salam, 2020; John, 2017; John et al., 2019, 2017; Shahzadi et al., 2019) studied both (i.e. the OP and OI at individual level) concepts as potential outcomes of the implementation of CSR at company level. As stated earlier, John et al. (2017, p. 9) and Farooq and Salam (2020, p. 7) have suggested a positive connection between the implementation of CSR at company level, OI and OP at individual level. However, in other related studies Shahzadi et al. (2019, p. 8) and John et al. (2019, p. 787) have noted that OP at individual level mediates the relationship between the implementation of CSR at company level and OI at individual level. Therefore, aforementioned self-contradictory outcomes of the above-mentioned studies (e.g. Farooq and Salam, 2020; Glavas and Godwin, 2013; John, 2017; John et al., 2019, 2017; Shahzadi et al., 2019) warrant further comprehensive analysis for assessing the connection between the implementation of CSR at company level, OP and OI at individual level. Moreover, Glavas and Godwin (2013) have also argued that mere perception of goodness and goodwill is not enough for determining the phenomenal relation between the implementation of CSR, OP and OI. Therefore, an empirical study is required to evaluate the relation among CSR, OP and OI in the garments manufacturing industry. For this purpose, building on the aforementioned rational explanation this study submits that:

**H3a.** Implementation of CSR has a positive impact on OP

**H3b.** Implementation of CSR has a positive impact on OI

Further, EE is an intentional and deliberate self-driven behavioral outcome which requires rational thinking and positive attitude towards ones’ workplace (Farooq and Salam, 2020; Kim and Gatling, 2017; Nikolova et al., 2019, p. 777; Real de Oliveira and Ferreira, 2014; Rich et al., 2010, p. 634). According to Farooq (2016) social support also plays an important role in uplifting EE at workplace (Salam, 2018; Tiwari and Lenka, 2019; Tsourvakas and Yantidou, 2018). Moreover, EE also has a substantial influence on DS IW, which inspires engaged employees to use their position in the organization to make an evocative contribution in their society (Christopher et al., 2017; Farooq and Salam, 2020; Roughton et al., 2019). If employees are fully engaged in their workplace they take pride and feel pleased to be identified with their employer (Chang et al., 2017; Farooq et al., 2018b); it ultimately means that they are taking the ownership of tasks assigned to them from their organization (Farooq and Salam, 2020; Roughton et al., 2019). Therefore, Henning and van de Ven (2017) have particularly stressed on the need of employees’ well-being, for overall better involvement and task performance at their workplace. Furthermore, according to van Zoonen and Treem (2019) and Baum (2017), OP and OI are also strong precursors of desire to get ahead and succeed in one’s professional life (Bagozzi et al., 2018; Farooq, 2018; Farooq and Salam, 2020; Goh et al., 2015; Knorr et al., 2011). However, DSIW is a very strong precursors of desire to get ahead and succeed at their workplace. Furthermore, according to DSIW, which inspires engaged employees to use their position in the organization to make an evocative contribution in their society (Christopher et al., 2017; Farooq and Salam, 2020; Roughton et al., 2019). Therefore, it is anticipated that by validating this complex and multifaceted proposed model theoretical knowledge in the field of CPP, SQ and CSR shall be extended and revamped in the context of DSIW. Moreover, due to its applied nature various practical and managerial implications for the garments manufacturing industry shall also be resulting from the outcomes of this study. Further detail regarding data analysis and research methodology is presented in the next section.

**4. Research methodology and data analysis**

This manuscript intends to revamp the role of the implementation of CPP, SQ and CSR in defining DS IW in the garments manufacturing industry. In view of the complexity of our proposed model (see Fig. 1), PLS approach is employed. PLS is a variance based method suitable for the composite nature of our proposed model (Farooq, 2018; Farooq and Salam, 2020; Hair, 2014; Hair et al., 2017; Salam and Farooq, 2020). For this purpose, data was collected from a garments manufacturing company located in Pakistan. A major reason for the selection of garments manufacturing company for the purpose of this research was the fact that textile industry is among the Wang’s (1999, p. 13) four most pollution intensive industries i.e. “textile, chemical, paper and food” (Wang, 1999, p. 13). Therefore, it is anticipated that this study will generate more awareness regarding the implementation and role of CPP, SQ and CSR in the garments manufacturing industry, which has been overlooked to date (Farooq and Salam, 2020). Furthermore, Pakistan is a developing country which is world’s fourth largest producer of raw cotton (Board of Investment, 2019). For it’s high quality cotton production and enormous focus on it’s textile sector, Pakistan is ranked as third largest producer of quality yarn around the globe (All Pakistan Textile Mills Association, 2020). Moreover, textile sector encompasses around 46% of the total manufacturing sector of Pakistan, yielding employment opportunities for around 35% of it’s total labor force (Board of Investment, 2019).

Therefore, these facts make Pakistan a suitable location for conducting such study on the impact of the implementation of CPP, SQ and CSR on DS IW in the garments manufacturing industry. Further, in order to determine a suitable sampling frame we thoroughly assessed relevant previous studies in the domain of CPP, SQ.
CSR and DSIW (e.g. Augusto de Oliveira et al., 2019; Farooq and Salam, 2020; Hilson, 2000; John, 2017; John et al., 2019, 2017; Kiperstok, 2000; Salam and Farooq, 2020; Shahzadi et al., 2019; Yüksel, 2008). During literature review it was observed that the sampling frame of various above-mentioned studies on the implementation of CSR and DSIW (e.g. John, 2017, p. 34; John et al., 2019, p. 287, 2017, p. 7; Shahzadi et al., 2019, p. 5) was confined to the middle managers only. However, we argue that middle managers are not the factual representatives of the employees’ cognitive working behavior in any organization (Blomquist and Müller, 2006; Farooq and Salam, 2020; Gouthier and Rhein, 2011). Because, in any organization middle managers merely work as a bridge for channelizing the communication between top management and first-line managers (Blomquist and Müller, 2006; Farooq and Salam, 2020; Gouthier and Rhein, 2011). Therefore, when we talk about employees, we should categorically exclude the people who are managing/supervising those (i.e. prospects/respondents under-study) employees (Blomquist and Müller, 2006; Farooq and Salam, 2020; Gouthier and Rhein, 2011). This argument is also supported by Gouthier and Rhein’s (2011, p. 640) study on OP in multiple service industries from 37 different countries. In this context, Gouthier and Rhein (2011, p. 640) have agreed that the supervisors and managerial staff cannot alone represent the views of the whole workforce (i.e. specifically non-managerial staff working as their sub-ordinate) in their organization. For this reason, Gouthier and Rhein (2011, p. 640) had also excluded supervisors and managerial staff from their sampling frame. So that they could exclusively focus on the non-managerial staff working as subordinates in the service industries (Gouthier and Rhein, 2011, p. 640).

Furthermore, this notion of Gouthier and Rhein (2011, p. 640) is also supported by a post-hoc analysis presented in Farooq and Salam’s (2020, p. 13) recent study on the implementation of CSR and DSIW in commercial airlines. According to Farooq and Salam (2020, p. 13) the magnitude of the influence of the implementation of CSR on DSIW is significantly different in the managerial and non-managerial staff members working in the commercial airlines (Farooq and Salam, 2020, p. 13). Therefore, considering the guidelines of Gouthier and Rhein (2011, p. 640) and on the base of the findings presented by Farooq and Salam (2020, p. 13) top management, executives, middle managers, functional managers and even line managers were all excluded from our sampling frame. Furthermore, selection of the company was cautiously made on the base of its concern towards implementation of CPP, SQ and CSR at company level. Before actual data collection frequent meetings were also conducted with the top management of selected company for assessing their creed for the implementation of CPP, SQ and CSR at company level. Moreover, another reason for the selection of our chosen sector (i.e. garments manufacturing industry) was that authors had a practical possibility to perform this study in such sector. Further detail regarding operationalization of our under-study constructs and preparation of self-administered questionnaire is presented in the next section.

4.1. Operationalization of constructs

All constructs (i.e. CPP, SQ, CSR, EE, OP, OI and DSIW) were cautiously operationalized for articulating a suitable and reliable self-administered questionnaire. In order to assure the reliability of our questionnaire previously tested measurement items were borrowed from earlier studies. Many academicians (e.g. Dillman et al., 2009; Farooq et al., 2019; Lavrakas, 2008a, 2008b; Lyberg...
et al., 1997; Salant and Dillman, 1994) have advocated the usefulness of self-administered questionnaire for its ability to minimize the influence of investigators (Farooq et al., 2018b; Salam et al., 2017). Whereas, in the interviewer-administered surveys respondents are unable to develop their own comprehension about the subject matter (Babbie, 1990; Lavrakas, 2008b). Furthermore, in a self-administered questionnaire onus of comprehending and developing a neutral unbiased perception regarding the subject matter solely lies with the respondents, which minimizes the possibility of interviewers’ influence/biases (Lyberg et al., 1997). Observing the guidelines of Lyberg et al.’s (1997) all principles for designing a reliable self-administered questionnaire were cautiously observed in this study. A comprehensive nineteen items scale was borrowed from Yüksel (2008, p. 556) for measuring CPP. Yüksel (2008, p. 556) has reported three main dimensions of CPP i.e. “(1) production and processes design planning, (2) product design and (3) logistic design” (Yüksel, 2008, p. 556). For assessing all three dimensions of CPP relevant questions were asked regarding the overall layout of production facility, types of machinery/tools/equipment being used for the production and environmental considerations while designing logistic network for finished goods.

Selection of an appropriate layout for production facility, eco-friendly production plants/machinery and deployment of right tools and equipment play a very significant role in minimizing hazardous emissions (Yüksel, 2008, p. 551). Many academicians (e.g. Cazaudehore et al., 2019; Ling et al., 2015; Nachiappan and Muthukumar, 2010; Wang, 1999; Wei et al., 2019) have also acknowledged that COD level can be reduced with the deployment of modern and eco-friendly machinery/production plants (Aranda-Uson et al., 2020; Cesar da Silva et al., 2021; Ware, 2021). Particularly, Nachiappan and Muthukumar (2010) have explored various innovative and hybrid techniques for reducing COD level in the textile sector. Furthermore, Wang (1999, p. 13) has also observed that state-owned plants with old machinery had reported a higher COD level as compared to the privately owned modern industrial plants. Therefore, while assessing CPP considerable focus was given to the overall layout of production facility, eco-friendly nature of production plant/machinery along with other tools and equipment being used in our selected garments manufacturing company. Further, SQ was analyzed by a five items scale borrowed from different studies (i.e. Balaban et al., 2013, pp. 409–410; Martins et al., 2019, p. 191; Wang and Chiu, 2011, p. 1794). Similarly, CSR was assessed using an eight items measurement instrument borrowed from Glavas and Kelley (2014, pp. 191–193). Likewise, EE was assessed for it’s all three dimensions i.e. “(1) physical, (2) emotional and (3) cognitive engagement” using an eleven items measurement instrument borrowed from Rich et al. (2010, p. 634). Similarly, OP and OI were analyzed using three and six items scales adapted from Lea and Webley (1997, pp. 325–326) and (Mael and Ashforth 1992, p. 122) correspondingly. Furthermore, a four items measurement instrument was borrowed from Gully et al. (2013, p. 949) and Morgeson and Humphrey (2006, pp. 1337–1339) for analyzing DSIW. Additionally, for the purpose of enhanced readability and comprehension of our questionnaire borrowed items were modified and rephrased accordingly in the local context of this study. Further, complete detailed list of all items is also stipulated in Appendix A.

4.2. Data collection

As stated earlier, data was collected through a carefully articulated self-administered questionnaire. For this purpose, considering the guidelines of Farooq et al. (2019) a seven points (i.e. 1 = Entirely Disagree, 7 = Entirely Agree) Likert type scale was used. In this way, prospects (i.e. respondents) also had a possibility to report that for instance their answer is “not at all/absolutely not” for a given construct (e.g. they have no OP or no OI). For example, in case of item number one of OP (i.e. OP_1 “I feel proud of my association with my workplace”), prospects have the possibility to self-report the existence or non-existence and extent of pride they feel in their association with their workplace on a scale from one to seven. Here a higher value on the scale (e.g. 7) indicates existence of a higher level of OP; however, a lower value on the scale indicates low level of OP; moreover, lowest value on the scale (i.e. 1) indicates it’s non-existence/no OP. Hence, prospects with high OP had the possibility of reporting it by selecting a higher value on the scale. Whereas, if a prospect selects lowest value on the scale (i.e. 1), it indicates that he/she has chosen to entirely disagree with the statement presented in OP_1 which ultimately ratifies that he/she enjoys no OP. Same outset of deciphering applies to other items and constructs presented in Appendix A.

Furthermore, as stated earlier, this study observed the guidelines of Gouthier and Rhein (2011, p. 640) and Farooq and Salam (2020, p. 13) for choosing a suitable sampling frame for further analysis. Therefore, it was determined that non-managerial staff is a true and factual representative of the employees’ cognitive behavior at workplace (Farooq and Salam, 2020, p. 13; Gouthier and Rhein, 2011, p. 640). As a result, all policy makers, managerial and supervisory staff members were excluded from the sampling frame of this study. Therefore, considering all the aforementioned factors, convenience sampling approach was employed and data collection started with 500 questionnaires, which were distributed among the non managerial staff members employed at a selected garments manufacturing company located in Pakistan. Questionnaires were distributed in two different shifts. 344 questionnaires were received back, out of which 24 incomplete questionnaires were discarded before data analysis. Remaining 320 completed questionnaires making a 64% response ratio were retained for further data analysis. Further, now next section elaborates the details regarding data screening, pre-analysis, demographic assessment of respondents, common-method variance (CMV) and non-response bias.

4.3. Data screening and pre-analysis

As stated earlier, PLS approach was used for evaluating the proposed model. Choice of this approach was made after considering the intricate and composite nature of the constructs and propositions elaborated in our proposed structural model (see Fig. 1). Further, as per the procedure outlined by Hair et al. (2017) a comprehensive two step assessment process was performed (i.e. measurement models were distinctly analyzed before examining the proposed inner/structural model) for data analysis. Furthermore, data was very thoroughly assessed for any missing values and outliers. For this purpose, considering the guidelines of Cooper and Schindler (2001) a comprehensive data screening and pre-analysis was performed for identifying potential outliers and missing values in the data collected for this study. Proper treatment of missing values is very important for ensuring the sanctity of the findings presented by any study (Barnes and Hinton, 2008; Bryman and Bell, 2011; Kumiega and Van Vliet, 2008; Saunders et al., 2009). For that reason, mean replacement methodology was employed for treating missing values.

Further, thorough demographic assessment was also performed for eliminating any chances of potential demographic biases. Demographic assessment revealed that our respondents comprised of 218 male and 102 female employees. Hence, our data represents a significant proportion from both genders. Further, 43% of our participants were between 30 and 40 years of age, and 52% of them had 5–10 years of work experience. Furthermore, 48% had a primary
school certificate, followed by 31% who had a secondary school certificate. These demographic attributes confirm that our data provides a balanced and unbiased representation of gender, age and experienced workers, which can offer a neutral insight regarding the impact of the implementation of CPP, SQ and CSR on DSIW in the garments manufacturing industry. Further, complete details of the demographic assessment of our respondents are also provided in Table 1.

Furthermore, CMV bias was cautiously tested using Podsakoff et al.’s (2003, p. 889) recommendations. CMV bias is regarded as a major concern in the behavioral studies (Chang et al., 2010; Pallant, 2011, p. 192; Podsakoff et al., 2003, p. 889; Reio, 2010). Harman’s (1976) single factor (i.e. also known as one factor test) analysis was performed. For this purpose, observing principal components extraction method all 56 items were placed into a single exploratory factor analysis. As per the suggestions of Podsakoff et al. (2003, p. 889) an unrotated factor analysis was examined, which extracted seven different components/factors (i.e. CPP, SQ, CSR, EE, OP, OI and DSIW). Findings of single factor test have confirmed the nonexistence of CMV bias. As stated earlier, this study generated a good response rate of 64%. However, still it was considered imperative to perform a non-response bias test (Poutziouris et al., 2006; Tashakkori and Teddlie, 2003). Considering the recommendations of Armstrong and Overton (1977), an extrapolation approach was used for assessing the non-response bias. For this purpose, mean values of first hundred respondents were compared with the mean values of last hundred respondents. Results confirmed that there was no significant (p < 0.05) difference. These findings of extrapolation approach have confirmed the nonexistence of the non-response bias. After this comprehensive discussion of pre-analysis and data screening, now next section describes the assessment of measurement models.

4.4. Assessment of measurement models

Assessment of measurement models aims to assure the validity and reliability of data used for measuring the underlying constructs (Hair et al., 2017; Salam and Farooq, 2020). Reliability was thoroughly assessed by Cronbach’s (1951) alpha (α), Dijkstra and Henseler’s (2015) rho (pA) (i.e. also known as rho_A) and Jöreskog’s (1973; 1974) rho (pc) (i.e. also known as composite reliability) values. According to Werts et al., 1974 and Chin (1998, p. 320), Jöreskog’s (1973; 1974) rho (pc) offers a more robust approach which is suitable in SEM analysis for assessing the constructs’ composite reliability. Derived from the loading values of a SEM model Jöreskog’s (1973; 1974) rho (pc) offers a conservative assessment with an upper limit of the indicators’ overall composite reliability (Cheah et al., 2018, p. 145; Chin, 1998, p. 320; Kappel, 2019, pp. 131–156). For it’s robust nature many scholars (e.g. Anderson and Gerbing, 1984; Cheah et al., 2018, p. 145; Kappel, 2019, pp. 131–156; Milten et al., 2016, p. 4661; Peterson and Merunka, 2014) have employed Jöreskog’s (1973; 1974) rho (pc) along-with traditional Cronbach’s (1951) alpha (α) values as an indicator of reliability in their SEM models. However, considering Sijtsma’s (2008) viewpoint on the shortcomings of Cronbach’s (1951) alpha (α) values we have employed a more latest and modern approach i.e. Dijkstra and Henseler’s (2015) rho (pA) in addition to the traditional Cronbach’s (1951) alpha (α) and Jöreskog’s (1973; 1974) rho (pc) values. Findings presented in Table 2 have confirmed the reliability of our measurement models (i.e. CPP, SQ, CSR, EE, OP, OI and DSIW), as all aforementioned indicators of reliability are within the acceptable range.

Further, as per the recommendations of Hair et al. (2017) construct level correlation coefficient values, which are a quite vigorous measure for assessing the direction (i.e. positive or negative relationship) and strength (i.e. value closer to –1.0 is considered a strong positive and value closer to –0.1 is considered a strong negative) of a linear connection among underlying latent constructs are also provided in Table 2. According to Ratner (2009), positive correlation coefficient values ranging between 0.7 and 1.0 signify a positive and strong linear connection between latent constructs. As presented in Table 2, CPP has a positive and strong relationship with EE, OI and DSIW (i.e. 0.807, 0.850 and 0.753 respectively); whereas, it’s relationship with SQ, CSR and OP (i.e. 0.028, 0.068 and 0.630 respectively) is also positive, but not very strong. Further, it is confirmed that all of our proposed direct predictors of DSIW (i.e. CPP, EE, OP and OI) also have a positive and strong linear connection with DSIW (i.e. 0.753, 0.781, 0.714 and 0.797 respectively). Moreover, an overview of the indicator level correlation values is also presented in Appendix B.

Furthermore, all measurement models (i.e. CPP, SQ, CSR, EE, OP, OI and DSIW) were also evaluated for convergent (i.e. by average variance extracted (AVE) approach) and discriminant (i.e. by cross loading approach) validity. AVE values enlisted in Table 2 have fulfilled the Hair et al.’s (2017, p. 102) condition of 0.5 threshold for establishing the convergent validity of our measurement models (i.e. CPP, SQ, CSR, EE, OP, OI and DSIW). Further, cross loading values offer a compact way of analyzing the discriminant validity (Hair et al., 2011, 2017). As per Hair et al. (2017, pp. 104–107), discriminant validity of an indicator is established through cross loading values, when an indicator shares it’s highest loading with it’s own underlying latent construct (Farooq, 2018; Salam and Farooq, 2020). For instance, CPP_1 should share it’s highest loading with CPP. Findings presented in Table 3 have confirmed that all indicators signify highest loading value on their relevant underlying constructs and all loading values (i.e. bold values in Table 3) are above the 0.5 threshold level suggested by Hair et al. (2011, p. 145, 2017, pp. 104–107). Hence, these findings have fulfilled Hair et al.’s (2017, pp. 104–107) criterion for establishing discriminant validity through cross loading values. Now, next section elaborates the assessment of structural model proposed by this study.

4.5. Assessment of structural model

Structural model is usually denoted also as inner model and it’s assessment culminates with the hypothesis assessment (Hair et al., 2017; Salam and Farooq, 2020). Findings presented in Fig. 2 provide a quick overview of the results derived from our inner/structural

| Table 1 |
| --- |
| **Demographic analysis.** |
| Gender | Frequency (N = 320) | Percentage % |
| Male | 218 | 68% |
| Female | 102 | 32% |
| Age | 20–30 Years | 77 | 24% |
| 30–40 Years | 137 | 43% |
| 40–50 Years | 64 | 20% |
| 50–60 Years | 42 | 13% |
| Total Work Experience | 1–5 Years | 16 | 5% |
| 5–10 Years | 167 | 52% |
| 10–15 Years | 102 | 32% |
| 15–20 Years | 35 | 11% |
| Education | Primary School | 154 | 48% |
| Secondary School | 99 | 31% |
| High School | 35 | 11% |
| University Degree | 32 | 10% |

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However, as per Hair et al. (2017) $R^2$ value alone is inadequate for gauging the efficacy of a proposed structural model (Farooq, 2018; Farooq and Salam, 2020; Salam and Farooq, 2020). Therefore, in addition to $R^2$ value assessment we performed Stone (1974) and Geisser’s (1974) $Q^2$ value assessment for all endogenous constructs (i.e. SQ, EE, OP, OI and DSIW) and also assessed all of the proposed relationships with Cohen’s (1988) effect size $f^2$ values. As stated by Wold (1982), p. 30 cross validation of redundancy should be performed by using Stone (1974) and Geisser’s (1974) $Q^2$ value assessment. Further, in this regard Chin (1998, p. 318) has also recommended the use of Stone (1974) and Geisser’s (1974) $Q^2$ analysis for establishing the predictive relevance of a structural/inner model. Considering their recommendations complete calculation of our $Q^2$ values is presented in Table 4.

As stated earlier, $Q^2$ values assess the cross validation of redundancy, and a $Q^2$ value which is larger than zero endorses the establishment of predictive relevance (Hair et al., 2017). Findings presented in Table 4 have revealed various interesting outcomes. Starting with EE that has a $Q^2$ value of 0.299, followed by OP depicting a $Q^2$ value of 0.439, OI with a $Q^2$ value of 0.405 and DSIW that has a $Q^2$ value of 0.418. These results have confirmed that except for SQ that has a $Q^2$ value of $0.001$ all other endogenous constructs (i.e. EE, OP, OI and DSIW) have a significant $Q^2$ value. Through these results predictive relevance of our proposed model for assessing DSIW is further established. Furthermore, as recommended by Chin (1998, p. 316) we also performed Cohen’s (1988) effect size $f^2$ value assessment for measuring the effect size of each proposed relation before conducting final hypotheses assessment (see Table 5).

Findings of Cohen’s (1988) effect size $f^2$ values presented in Table 5 have confirmed a large effect size of CPP on OP and OI (i.e. 1.997, 1.241 and 3.468 respectively). However, contrary to our initial submissions Cohen’s (1988) effect size $f^2$ has confirmed that CPP has a very small (i.e. which can be interpreted as no effect (NE) size) effect size on DSIW and SQ (i.e. 0.013 and 0.001 respectively).

Further, it is confirmed that SQ has a small effect size on EE (i.e. 0.084), and that it has a medium effect size on OP and OI (i.e. 0.281 and 0.292 respectively). Furthermore, it is also confirmed that CSR has a large effect size on OP (i.e. 0.924) and a small effect size on OI (i.e. 0.116). Moreover, it is found that EE, OP and OI have a small effect size (i.e. 0.058, 0.059 and 0.089 respectively) on DSIW. For a further detailed assessment of our proposed structural model, $t$-values derived from bootstrapping approach were also assessed for a thorough hypotheses assessment. A complete list of hypotheses assessment is provided in Table 6.

Thorough empirical assessment of our initial propositions has revealed that hypothesis H1a, which is about the relation between CPP and $\beta$ (0.802; $t$-value = 42.738; $p < 0.01$) is significant and supported. H1b has validated the direct relation between CPP and OP ($\beta$ = 0.128; $t$-value = 2.141; $p < 0.05$). Moreover, H1c has validated the significance of our proposed relation between CPP and OP ($\beta$ = 0.587; $t$-value = 20.828; $p < 0.01$). Likewise, H1d is also significant ($\beta$ = 0.832; $t$-value = 43.477; $p < 0.01$).

As presented in Fig. 2 our proposed model has yielded a considerable $R^2$ value of 0.713 that is regarded as a high explanatory power in social sciences.
notion of our anticipated relation among CPP and OI. However, contrary to our initial proposition, relation between CPP and SQ ($\beta = 0.028$; $t$-value $= 0.479$; $p < 0.05$) is not significant; therefore, H1e is not supported. Furthermore, proposed relation between SQ and EE ($\beta = 0.164$; $t$-value $= 4.706$; $p < 0.01$) has validated the significance of H2a. Similarly, hypothesis H2b has confirmed a significant relation between SQ and OP ($\beta = 0.279$; $t$-value $= 9.222$; $p < 0.01$). Likewise, H2c which is about the relation between SQ and OI ($\beta = 0.241$; $t$-value $= 9.108$; $p < 0.01$) is significant and supported as well. Further, proposed relation among CSR and OP ($\beta = 0.507$; $t$-value $= 17.841$; $p < 0.01$) is likewise significant. Furthermore, proposed relation among CSR and OI ($\beta = 0.152$; $t$-value $= 6.061$; $p < 0.01$) is also significant and has validated H3b. Similarly, hypothesis H4 is also supported and confirms the proposed relation between EE and DSIW ($\beta = 0.257$; $t$-value $= 4.972$; $p < 0.01$). Moreover, findings of hypothesis H5 have established a positive relation between OP and DSIW ($\beta = 0.203$; $t$-value $= 4.891$; $p < 0.01$). Furthermore, a significant impact ($\beta = 0.340$; $t$-value $= 5.885$; $p < 0.01$) is also observed among OI and DSIW, providing significant empirical support for hypothesis H6. This detailed discussion of hypotheses assessment culminates the analysis of our structural model. Further discussion regarding importance-performance map analysis (IPMA) and goodness of fit (GoF) index continues in next section.

### 4.6. Importance-performance map analysis (IPMA)

IPMA is a contemporary approach which offers a graphical and more practical way of assessing the outcomes of latent predictive constructs (Farooq et al., 2018a; Ringle and Sarstedt, 2016). This approach is aimed to extend the use of path coefficient values by offering a comparison of construct's importance and performance (Farooq et al., 2018a; Hair et al., 2017; Ringle and Sarstedt, 2016). As stated earlier, IPMA is a practical approach; therefore, it is aimed to identify the constructs with highest importance (i.e. also referred as highest total effect) and lowest performance (Hair et al., 2017). Further, Ringle and Sarstedt (2016, p. 1874) have suggested the use of IPMA in assessing the importance and performance of constructs. Table 4 and Table 5 below illustrate the importance-performance map and the Cohen’s $f^2$ effect size for each construct.

#### Table 4
Construct level cross-validated predictive relevance.

| Constructs | SSO | SSE | $Q^2$ ($=1$-SSE/SSO) |
|------------|-----|-----|----------------------|
| CPP        | 6080.000 | 6080.000 | 0.000 |
| SQ         | 1600.000 | 1601.126 | -0.001 |
| CSR        | 2560.000 | 2560.000 | 0.000 |
| EE         | 3520.000 | 2466.335 | 0.299 |
| OP         | 960.000 | 538.181 | 0.439 |
| OI         | 1920.000 | 1142.607 | 0.405 |
| DSIW       | 1280.000 | 745.188 | 0.418 |

#### Table 5
Cohen’s (1988) Effect Size $f^2$.

| Proposed Hypotheses | Cohen’s (1988) Effect Size $f^2$ |
|---------------------|----------------------------------|
| H1a                 | CPP $\rightarrow$ EE $1.997^*$ |
| H1b                 | CPP $\rightarrow$ DSIW $0.013$ (NE) |
| H1c                 | CPP $\rightarrow$ OP $1.241^*$ |
| H1d                 | CPP $\rightarrow$ OI $3.468^*$ |
| H1e                 | CPP $\rightarrow$ SQ $0.001$ (NE) |
| H2a                 | SQ $\rightarrow$ EE $0.084^{**}$ |
| H2b                 | SQ $\rightarrow$ OP $0.281^{**}$ |
| H2c                 | SQ $\rightarrow$ OI $0.292^{**}$ |
| H3a                 | CSR $\rightarrow$ OP $0.924^{**}$ |
| H3b                 | CSR $\rightarrow$ OI $0.116^{***}$ |
| H4                  | EE $\rightarrow$ DSIW $0.058^{***}$ |
| H5                  | OP $\rightarrow$ DSIW $0.059^{***}$ |
| H6                  | OI $\rightarrow$ DSIW $0.089^{***}$ |

Note: As described by Hair et al. (2017, p. 178), criteria for assessing the Cohen’s (1988) effect size $f^2$ value is $^{*}(f^2 \text{value} \geq 0.350 \text{ = large effect size});^{**}(f^2 \text{value} \geq 0.150 \text{ = medium effect size});^{***}(f^2 \text{value} \geq 0.02 \text{ = small effect size})$ and NE = No Effect (Hair et al., 2017, p. 178).
of indicators level IPMA as a relatively new approach along-with constructs level IPMA. According to Streukens et al. (2017), indicators level IPMA is an extended version of the constructs level IPMA, which offers more action-ability and practicality in terms of managerial implications (Farooq, 2016; Ringle and Sarstedt, 2016; Streukens et al., 2017). Similar to the notion of constructs level IPMA, indicators level IPMA is aimed to identify the indicators with highest importance (i.e. highest total effect) and lowest performance. Hence, findings of our constructs level IPMA and indicators level IPMA can offer practical implications for senior/executive managers and policy/decision makers in the field of garments manufacturing industry (Ghasemy et al., 2017; Streukens et al., 2017). Therefore, in view of the practical nature of this research we decided to perform both (i.e. indicators level and constructs level) IPMA analyses for assessing the importance and performance of all indicators and latent predictive constructs (i.e. CPP, SQ, CSR, EE, OP and OI) involved in determining DSIW. Next section elaborates the results derived from indicators level IPMA, followed by the results derived from the constructs level IPMA.

4.6.1. Indicators level IPMA for DSIW

As stated earlier, many academicians (e.g. Ringle and Sarstedt, 2016; Streukens et al., 2017) have accentuated the importance of indicators level IPMA for improved practicality and action-ability of this approach (Farooq, 2018; Farooq et al., 2018a). Considering these suggestions of Streukens et al. (2017) and Ringle and Sarstedt (2016) we have performed indicators level IPMA for DSIW. Table 7 presents a detailed overview of the indicators level IPMA for DSIW. As stated earlier, indicators level IPMA analysis is aimed to identify the indicators with lowest performance (i.e. so that managers can focus on those low performing indicators for future betterment) and highest importance (Farooq et al., 2018a; Hair et al., 2017; Salam et al., 2017). As depicted in Table 7, among all the indicators of all six constructs which were employed as direct or indirect predictors of DSIW (i.e. CPP, SQ, CSR, EE, OP and OI), OP_1 and OI_1 have a highest level of importance (i.e. 0.133 and 0.112 correspondingly); however, their performance (i.e. 49.141 and 50.156 respectively) is not among the highest performing indicators. Furthermore, it is observed that CSR_4 and CSR_7 have a lowest importance (i.e. 0.012 and 0.013 respectively) among all the indicators presented in Table 7; however, their performance (i.e. 48.125 and 49.323 respectively) does not corroborate with other low performing indicators presented in Table 7. For the ease of readers a brief overview of results derived from our indicators level IPMA for DSIW is also presented in Fig. 3.

Further, OI_2 and EE_7 have a lowest performance value (i.e. 41.042 and 42.240 correspondingly); however, their importance

| Table 6 |
| --- |
| **Proposed Hypotheses** | **Standard Beta β** | **Standard Deviation** | **T-value ([O/STDEV])** | **P Values** | **Decision** |
| H1a | CPP → EE | 0.802* | 0.191 | 42.738 | 0.000 | Supported |
| H1b | CPP → DSIW | 0.128** | 0.060 | 2.141 | 0.033 | Supported |
| H1c | CPP → OP | 0.387* | 0.029 | 20.282 | 0.000 | Supported |
| H1d | CPP → OI | 0.382* | 0.019 | 43.477 | 0.000 | Supported |
| H1e | CPP → SQ | 0.028 (NS) | 0.058 | 0.479 | 0.632 | Not Supported |
| H2a | SQ → EE | 0.164* | 0.035 | 4.706 | 0.000 | Supported |
| H2b | SQ → OP | 0.279* | 0.030 | 9.222 | 0.000 | Supported |
| H2c | SQ → OI | 0.241* | 0.026 | 9.108 | 0.000 | Supported |
| H3a | CSR → OP | 0.507* | 0.028 | 17.841 | 0.000 | Supported |
| H3b | CSR → OI | 0.152* | 0.025 | 6.061 | 0.000 | Supported |
| H4 | EE → DSIW | 0.257* | 0.052 | 4.972 | 0.000 | Supported |
| H5 | OP → DSIW | 0.203* | 0.041 | 4.891 | 0.000 | Supported |
| H6 | OI → DSIW | 0.340* | 0.058 | 5.885 | 0.000 | Supported |

Note: As described by Hair et al. (2017, p. 138), criteria for assessing the standard beta $\beta$ is *($t$-value $\geq 2.58$ – $p < 0.01$); **($t$-value $\geq 1.96$ – $p < 0.05$) and NS – Not Significance (Hair et al., 2017, p. 138).

| Table 7 |
| --- |
| **Indicators level IPMA for DSIW.** |
| **Indicators** | **Importance** | **Performances** |
| CPP_1 | 0.057 | 52.604 |
| CPP_2 | 0.030 | 51.927 |
| CPP_3 | 0.033 | 52.708 |
| CPP_4 | 0.029 | 49.948 |
| CPP_5 | 0.028 | 50.469 |
| CPP_6 | 0.031 | 52.500 |
| CPP_7 | 0.029 | 52.031 |
| CPP_8 | 0.033 | 51.042 |
| CPP_9 | 0.031 | 52.500 |
| CPP_10 | 0.027 | 49.792 |
| CPP_11 | 0.029 | 51.250 |
| CPP_12 | 0.028 | 50.729 |
| CPP_13 | 0.028 | 50.781 |
| CPP_14 | 0.029 | 51.250 |
| CPP_15 | 0.032 | 53.073 |
| CPP_16 | 0.032 | 51.667 |
| CPP_17 | 0.030 | 51.302 |
| CPP_18 | 0.030 | 51.823 |
| CPP_19 | 0.029 | 51.177 |
| SQ_1 | 0.046 | 47.500 |
| SQ_2 | 0.023 | 48.646 |
| SQ_3 | 0.019 | 47.865 |
| SQ_4 | 0.026 | 45.990 |
| SQ_5 | 0.025 | 48.385 |
| CSR_1 | 0.028 | 50.104 |
| CSR_2 | 0.015 | 47.760 |
| CSR_3 | 0.015 | 51.719 |
| CSR_4 | 0.012 | 48.125 |
| CSR_5 | 0.014 | 50.625 |
| CSR_6 | 0.014 | 49.740 |
| CSR_7 | 0.013 | 49.323 |
| CSR_8 | 0.014 | 50.365 |
| EE_1 | 0.059 | 49.375 |
| EE_2 | 0.021 | 57.760 |
| EE_3 | 0.020 | 50.759 |
| EE_4 | 0.022 | 49.875 |
| EE_5 | 0.020 | 49.107 |
| EE_6 | 0.021 | 47.250 |
| EE_7 | 0.021 | 42.240 |
| EE_8 | 0.021 | 50.536 |
| EE_9 | 0.021 | 49.375 |
| EE_10 | 0.022 | 50.500 |
| EE_11 | 0.023 | 48.125 |
| OP_1 | 0.133 | 49.141 |
| OP_2 | 0.044 | 48.705 |
| OP_3 | 0.045 | 49.464 |
| OP_4 | 0.112 | 50.156 |
| OP_5 | 0.033 | 41.042 |
| OI_1 | 0.047 | 50.938 |
| OI_4 | 0.049 | 51.429 |
| OI_5 | 0.047 | 49.196 |
| OI_6 | 0.046 | 58.229 |
(i.e. 0.033 and 0.021 respectively) is noticeably better and higher than the aforementioned indicators with lowest importance (i.e. CSR_4 and CSR_7). Moreover, it is also observed that among all the indicators presented in Table 7, OI_6 and EE_2 have a highest performance (i.e. 58.229 and 57.760 respectively); however, their importance (i.e. 0.046 and 0.021 respectively) is not even close to the aforementioned indicators of highest importance (i.e. OP_1 and OI_1) for DSIW.

These findings suggest that a deep insight of indicators level IPMA for every construct (i.e. CPP, SQ, CSR, EE, OP and OI) involved in predicting DSIW is very useful for developing a practical approach regarding the subject matter. Further, a more detailed comprehension of the indicators of CPP has revealed that CPP_1 (importance = 0.057, performance = 52.604) has the highest level of importance, and CPP_10 (importance = 0.027, performance = 49.792) has depicted a lowest performance among all the indicators of CPP. Furthermore, although CPP_19 (importance = 0.029, performance = 53.177) has depicted a highest level of performance among all the indicators of CPP; yet, it is less important as compared to CPP_1. Similarly, among all the indicators of SQ, SQ_1 (importance = 0.046, performance = 47.500) has a highest importance, and SQ_4 (importance = 0.026, performance = 45.990) has depicted a lowest performance. Moreover, it is also observed that SQ_2 (importance = 0.023, performance = 48.646) which is an indicator with highest performance, does not have highest importance among all the indicators of SQ. Additionally, among all the indicators of CSR, CSR_1 (importance = 0.028, performance = 50.104) has a highest importance, and CSR_2 (importance = 0.015, performance = 47.760) has depicted a lowest performance.

Further, as depicted in Table 7, CSR_3 (importance = 0.015, performance = 51.719) has a highest performance, but it’s performance is comparable to CSR_1, which has a highest importance among all the indicators involved in measuring CSR in this study. Furthermore, for EE, EE_1 (importance = 0.059, performance = 49.375) has a highest importance, and EE_7 (importance = 0.021, performance = 42.240) has depicted a lowest performance. However, indicator with highest performance for EE, i.e. EE_2 (importance = 0.021, performance = 57.760) does not have a noteworthy importance among all the indicators involved in measuring EE. Likewise, for all the indicators of OP, OP_1 (importance = 0.133, performance = 49.141) has a highest importance, and OP_2 (importance = 0.044, performance = 48.705) is an indicator with lowest performance. However, indicator with highest performance for OP, i.e. OP_3 (importance = 0.045, performance = 49.464) does not have a highest importance among all the indicators of OP. Similarly, among all the indicators of OI, OI_1 (importance = 0.112, performance = 50.156) has a highest importance, and OI_2 (importance = 0.033, performance = 41.042) has depicted a lowest performance. However, indicator with highest performance for OI, i.e. OI_6 (importance = 0.046, performance = 58.229) does not have a highest importance among all the indicators involved in measuring OI.

4.6.2. Constructs level IPMA for DSIW

As stated earlier, constructs level IPMA is aimed to highlight the constructs with highest importance (i.e. also referred as highest total effect) and lowest performance (Hair et al., 2017). Therefore, a constructs level IPMA for DSIW was also performed involving all of the proposed direct and indirect precursors of DSIW. So that we can identify the constructs of highest importance (i.e. highest total effect) and lowest performance (i.e. among CPP, SQ, CSR, EE, OP and OI) for DSIW.

As depicted in Fig. 4 findings of our constructs level IPMA analysis have confirmed that CPP has a highest importance i.e. 0.595, followed by 0.335 for OI and 0.273 for EE. Further, it is found
that SQ has a lowest performance i.e. 47.622 among all the direct and indirect precursors of DSIW. This unanticipated result warrants further studies for assessing the role of SQ in the garments manufacturing industry. Moreover, through this constructs level IPMA analysis a distinguished standing of CPP is also established by its highest performance i.e. 51.682 as a determinant of DSIW. This, unveiling of the excelsior characteristics of CPP as a construct of highest importance and highest performance for determining DSIW is a new perspective revamped by the findings derived from the constructs level IPMA for DSIW. A complete list of results derived from our constructs level IPMA analysis for DSIW is also provided in Table 8.

4.7. Goodness of fit (GoF) index

As suggested in the Farooq and Salam’s (2020, p. 14) recent PLS-SEM based study on CSR and DSIW, a GoF index was also calculated for estimating the model fit of our proposed model. (Tenenhaus et al. 2005, p. 173) approach was employed for calculating GoF index. Findings revealed a good model fit with a GoF_{large} value of 0.583 for our proposed model. Complete calculation of GoF index is stipulated in Table 9.

4.8. Discussion of findings

As stated previously, this study intends to broaden our understanding regarding cognitive facets of the implementation of CPP, SQ and CSR in the garments manufacturing industry. Environmental hazards of the emissions discharged from garments manufacturing industry are not veiled from anyone. Therefore, this study has suggested that the implementation of CPP at company level can play a positive role in reining in the point-source pollution discharged from garments manufacturing industry. Moreover, this study has proposed that the implementation of CPP can positively influence employees’ cognitive behavioral outcomes (i.e. EE, OP, OI and DSIW in our case). According to the best of our knowledge such relation between the implementation of CPP, SQ and CSR for determining aforementioned cognitive behavioral aspects (i.e. EE, OP, OI and DSIW in our case) of human behavior has never been simultaneously studied before. Therefore, this study has assessed the connection between the implementation of CPP, SQ and CSR at company level, for determining potential antecedents of EE, OP, OI and DSIW by adapting John et al.’s (2019, 2017) conceptual model (see Fig. 1). PLS-SEM analysis was performed for assessing the proposed model. Moreover, IPMA approach was also employed to explore a deep comprehension regarding the role of CPP, SQ, CSR, EE, OP and OI for instigating DSIW in the garments manufacturing industry.

Moreover, as previously mentioned in the research methodology and data analysis section of this manuscript that by excluding managerial staff from it’s sampling frame, this study has offered a more robust and factual representation of employees’ cognitive comprehensions (i.e. EE, OP, OI and DSIW). Therefore, unlike some prior studies on the implementation of CSR and DSIW (e.g. John, 2017; John et al., 2019, 2017; Shahzadi et al., 2019) our findings are not confined to the middle managers only. As a result, new comprehensions are explored in the domain of the implementation of CPP, SQ and CSR at company level for garments manufacturing.

![Fig. 4. Constructs level IPMA for DSIW.](image-url)
industry. Further, it was also observed during our literature review that majority of aforementioned studies (e.g. Augusto de Oliveira et al., 2019; Yusup et al., 2015; Zeng et al., 2010) on the implementation of CPP, were grounded on the concept of firm level performance only. By doing so, previous studies had overlooked the micro level impacts of the implementation of CPP on employees’ individual level cognitive behavioral aspects (Farooq and Salam, 2020). Therefore, this study has proposed that EE, OP, OI and DSIW are the individual level cognitive behavioral outcomes, which are imitated by the implementation of CPP, SQ and CSR at company level in the garments manufacturing industry. In this context, results derived from this empirical study suggest that top management should shoulder the responsibility of implementing CPP, SQ and CSR at company level for reaping their long-term micro level cognitive outcomes. Thereby, this study has rationally connected the concept of CPP, SQ and CSR with the domain of industrial psychology.

Furthermore, we suggest that DSIW of non-managerial staff in a true essence is a real metaphor, of the organizational concern towards implementing CPP, SQ and CSR related policies. As an ancient saying goes, "who pays the piper calls the tune" (Humphrey, 2017, p. 283; Marier, 2013, p. 322). Therefore, we argue that employees’ cognitive and behavioral outcomes (i.e. conduct at their workplace) are a metaphor of the organizational policy and concern towards environment, individuals and society (Farooq, 2016; Farooq and Salam, 2020). Starting with a bleak concept and proposition of the importance of CPP, SQ and CSR for various stakeholders in the garments manufacturing industry, outcomes of this study have empirically assessed the cognitive impact of the implementation of CPP, SQ and CSR on employees’ workplace behavior. As a unique finding of this study, our results have confirmed that if an organization is concerned towards the implementation of CPP, SQ and CSR for the betterment of individuals, society and environment, then these aspects of societal care and concern will also reflect at individual level, in the form of high EE, OP, OI and DSIW at workplace. As elaborated earlier, findings of this study have validated that CPP has a notable impact on EE, DSIW, OP and OI (see H1a, H1b, H1c and H1d). On the base of these findings about the cognitive facets of CPP, it is suggested that CPP is more than a mechanical phenomenon and it can open new prospects for understanding industrial psychology. Further, these findings have highlighted a soft side (i.e. cognitive aspects) of the implementation of CPP at company level, which is a major theoretical contribution in CPP literature.

Furthermore, validating the Konijnendijk’s (1993) proposition of need for harmony between production and sales department, findings of this study suggest that production of best garments or high quality goods is not the end of trade, rather it is the SQ of post-production processes which outlines the realization of a sustainable long term business in the garments manufacturing industry. In this regard, outcomes of this study have confirmed that SQ has a notable direct effect on EE, OP and OI (see H2a, H2b and H2c). Thereby, these outcomes suggest that we cannot factor out the intangible side (i.e. SQ) of quality in the garments manufacturing industry. In this context, it is suggested that SQ will not only help in striking business-to-business corporate deals, rather it can also aid in boosting the production of goods and retailing of finished goods by inculcating positive workmanship behavior in the shape of high EE, OP and OI in the garments manufacturing industry. Therefore, it is suggested that company-wide standard operating procedures (SOPs) can help in standardizing the delivery of best SQ in the garments manufacturing industry as well. Moreover, as mentioned earlier, implementation of CSR at company level is also meaningfully linked with the workmanship behavior in the garments manufacturing industry. Further, advancing the findings of similar earlier studies (e.g. Farooq and Salam, 2020; John, 2017; John et al., 2019, 2017; Shahzadi et al., 2019), results presented in the previous section of this study have confirmed that cognitive influence of the application of CSR is also positive and significant on OP and OI (see H3a and H3b) in the garments manufacturing industry.

However, it is pertinent to note that formerly stated earlier studies (e.g. Farooq and Salam, 2020; John, 2017; John et al., 2019, 2017; Shahzadi et al., 2019) do not offer a simultaneous integrated assessment of the implementation of CPP, SQ and CSR in the context of cognitive facets of workplace behavior in the garments manufacturing industry. Therefore, being first of it’s kind in the domain of CPP this study has effectively revamped and integrated the wide strands of CPP, SQ and CSR in a single yet comprehensive framework. Furthermore, these findings of this study suggest that along-with other off-target outcomes of CPP, SQ and CSR (i.e. profit maximization/monetary gains, organizational performance etc.) researchers should also highlight their micro level cognitive aspects (i.e. EE, OP, OI and DSIW in our case) while focusing on their implementation in the garments manufacturing industry. Furthermore, this study has also validated the proposition of a direct significant impact of EE, OP and OI on DSIW in the garments manufacturing industry (see H4, H5 and H6). These findings confirm the importance of micro level cognitive aspects in the context of recent extensive industrial development in the garments manufacturing industry. Moreover, adoption of multichannel social constructs have also intensified the importance of EE, OP, OI and DSIW at workplace (Farooq and Salam, 2020). Further, findings of this study also second the results of Roberts and David (2017) and confirm that EE is a significant predictor of workplace performance.

Moreover, these findings are also coinciding with Farooq and Salam’s (2020, p. 7) EE proposition, confirming that EE leads to a higher DSIW (see H4). Because, engaged employees are more productive in “bringing home the bacon” (Bering et al., 2019, p. 5; Bryant, 2020, p. 34; Gorman, 1999, p. 110; Petersen and Maynard, 1981, p. 87); for that reason, it is expected that with their optimum performance they can generate higher revenues for their organization (Farooq and Salam, 2020; Roberts and David, 2017). Therefore, this study is upright to claim that organizations grow (i.e. develop) through, what their employees are ready (i.e. willfully undertake) to go through. Further, we put forward that employees with higher DSIW should be empowered enough to operate with a perceived “Power to have a Significant Impact through Work” (PSIW). Building on Morgeson and Humphrey’s (2006, p. 1321) conception of work design and in-line with the Barrick et al.’s (2013, p. 134) notion of purposefulness, we propose this new concept of PSIW as a practicable progression of Gully et al.’s (2013, p. 936) phenomenon of DSIW. We define PSIW as a person’s perceived potential to be able to confer ease in the lives of individuals around him/her, with a
broader objective of an efficacious influence for the betterment of society through his/her work. In other words, a person with PSIW has a potential to practically strive (i.e. not just desire) for imparting a substantial, constructive and meaningful contribution through his/her work. This novel concept of PSIW can reduce workplace deviance to embers by enhancing overall job satisfaction and sociability quality. It is expected that employees with a higher sociability quality and DSIW will also have a higher PSIW. However, Salam and Farooq’s (2020) sociability quality concept can be employed along with our proposed model for validating this notion of PSIW.

Moreover, by introducing the concept of PSIW, outcomes of this study have practically and theoretically advanced the phenomenon of DSIW well beyond the initially stipulated scope of this study. Further pushing the envelope a detailed comprehensive IPMA analysis was also performed at both levels (i.e. indicators level IPMA and constructs level IPMA). Findings of our IPMA analysis have confirmed that CPP is the most important and highest performing predictor of DSIW (see Fig. 4). These results of IPMA analysis also offer various managerial and practical implications. Further validating the distinctive efforts of this study, results of GoF index have also confirmed that our conceptual model developed for determining the impact of the implementation of CPP, SQ and CSR on DSIW has yielded a substantially strong model fit. Therefore, this study has successfully assessed the cognitive influence of the simultaneous implementation of CPP, SQ and CSR at company level on DSIW in the garments manufacturing industry. Hence, this manuscript has introduced various new facets of the implementation of CPP, SQ and CSR in the domain of industrial psychology with a diverse perspective of the garments manufacturing industry (Babin et al., 1999; Farooq and Salam, 2020; Niedermeyer et al., 2010; Yüksel, 2008). These findings can help in plunging the perfidious workplace behavior with a right implementation of CPP, SQ and CSR at company level. Further discussion regarding future research directions/suggestions, theoretical contributions and managerial implications is outlined under the upcoming conclusion section.

5. Conclusion

Being a unique and first of its kind effort to assess the micro level impact of the implementation of CPP, SQ and CSR on individual level employees’ cognitive behavior at their workplace, this study has successfully explored and ramped-up their role in shaping EE, OP, OI and DSIW in the garments manufacturing industry. Though, since many decades implementation of CPP has been studied as a predictor of the organizational performance at firm level. However, eloquently differing from various previous studies, we have prudently joined the strands of diverse, multi-disciplinary and disparate constructs (i.e. CPP, SQ and CSR) for assessing the determinants of DSIW in the garments manufacturing industry. While exploring the repercussions of the hazardous environmental effects of the emissions from garments manufacturing industry, findings of this study articulate not to overstate the off-target outcomes (i.e. short term financial gains etc.) of the implementation of CPP, SQ and CSR at company level. Hence, where many studies tell us how things are (i.e. DSIW); this study was primarily aimed to find how things should be (i.e. in the context of the implementation of CPP, SQ and CSR at company level). Moreover, by incorporating the cognitive aspects of workmanship (i.e. EE, OP and OI in our case) this study has clearly revamped the fundamental underlying philosophy of the implementation of CPP, SQ and CSR at company level for upholding and stimulating DSIW at workplace. Moreover, findings of this study have also meticulously given a face-lift to the concept of EE in the backdrop of crippling job market in current economic scenario. Furthermore, this study acknowledges that engaged employees are more focused, productive (i.e. not phubbing at workplace) and goal oriented which contributes to their higher DSIW and industrial-ness at workplace. Additionally, this study has also proposed and defined a new concept of PSIW in social sciences. Potential congruence or incongruence of this newly coined terminology of PSIW with DSIW warrants more directional as well as non-directional exploration. However, novelty of this concept of PSIW in itself is a major theoretical contribution of this study. Moreover, role of CPP in determining SQ was also assessed in this study; however, contrary to our initial proposition this relationship was found to be insignificant (see H1e). Further, in this d’etat it is confirmed that employees’ workplace behavior is a metaphor of the organizational concern towards individuals, society and environmental protection. Moreover, being on the cusp of today’s rapidly changing workplace requirements, unquenchable modernity, technological advancements and constantly evolving inconsistent workplace behaviors proposed model can uprightly serve as an impregnable bulwark against environmental, social and workplace related woes. Therefore, reiterating the findings of this study, we confirm that if an organization is committed towards implementing CPP (for environmental protection and pollution eradication), SQ (i.e. for customer care and individuals’ well-being) and CSR (i.e. for social well-being and overall societal benefit) then these traits of conscience will also reflect in the employees’ cognitive behavior in the shape of high EE, OP, OI and DSIW at workplace. Therefore, a stable policy and firm stance for incorporating CPP, SQ and CSR is suggested to prioritize their implementation at company level in the garments manufacturing industry.

5.1. Theoretical contributions

Findings derived from this study contribute in ramping-up a theoretically significant impact in the area of industrial psychology. This study has assessed individual level micro influence of the implementation of CPP, SQ and CSR at company level on the cognitive, perceptive and behavioral aspects of workmanship in the garments manufacturing industry. As stated in the literature review section, very few studies (e.g. Farooq and Salam, 2020; John, 2017; John et al., 2019, 2017; Jun Hao, 2019; Morgeson et al., 2013; Shahzadi et al., 2019) have assessed the link among CSR and DSIW. Further, Pham and Paillé (2019, p. 265) explored DSIW with a perspective of “green recruitment and selection” (GRS) related processes and Daly (2018) explored DSIW with a volunteering perspective of recruitment outcomes. Hence, all earlier studies on DSIW (e.g. Daly, 2018; Farooq and Salam, 2020; Gully et al., 2013, p. 936; John, 2017; John et al., 2019, 2017; Jun Hao, 2019; Morgeson et al., 2013; Pham and Paillé, 2019, p. 265; Shahzadi et al., 2019) have somehow undermined and convulsed the incorporation of CPP and SQ in determining DSIW. Therefore, in order to fill this gap in DSIW literature, this study has introduced the concept of CPP and SQ in the literature of DSIW. Further, by imparting a significant theoretical contribution in the context of practical implementation of CPP, SQ and CSR at company level in the garments manufacturing industry, findings of this study have efficaciously bridged the research gap identified in the beginning of this study.

Given the fact that employees’ cognitive behavior is adapted by their continuous learning, findings of this study have industriously corroborated the role of EE, OP and OI in the domain of garments manufacturing industry. Furthermore, outcomes of this study have confirmed that DSIW is a result of individual focused actions, which require a noteworthy expanse of EE, OP and OI. These results also coincide with Farooq and Salam’s (2020, p. 12) study on CSR and DSIW. Likewise, outcomes of this study have also explained that
how workers with conscience are more likely to have a higher DSIW which describes the conception of their personality traits (Digman, 1990; Edwards, 1991). Hence, in an effort to simultaneously assess the significance of the implementation of CPP, SQ and CSR for influencing DSIW in the garments manufacturing industry, this manuscript has offered a notable theoretical contribution by successfully extending John et al.’s (2019, 2017) work in the domain of DSIW (Bernath and Vidal, 2007; Farooq and Salam, 2020; Ladik and Stewart, 2008). Additionally, theoretical connotations of the phenomenon of DSIW are also extended with our proposition of PSIW. Moreover, in a broader perspective this study can significantly help in enhancing our understanding about the social and cognitive aspects of the implementation of CPP, SQ and CSR at company level (Homs, 1958; Jun Hao, 2019; Wood, 1991).

5.2. Managerial implications

By exploring the potential role of the implementation of CPP, SQ and CSR in determining DSIW this study has submitted a liaises of CPP with other organizational and individual level constructs. By logically combining the assorted dimensions and mislay strands of all under-study multi-disciplinary constructs (i.e. CPP, SQ, CSR, EE, OP, OI and DSIW) this study has indubitably broadened our understanding regarding the micro level influence of the implementation of CPP, SQ and CSR in the garments manufacturing industry. Our findings have established that CPP has a notable impact on EE, DSIW, OP and OI. Further, implementation of CPP at company level not only offers a noteworthy positive impact on individual level cognitive aspects (i.e. EE, DSIW, OP and OI in our case), but it is also a worth mentioning tool for abating point source pollution at industrial level. On the base of these findings we suggest that similar to CSR budget a substantial separate budget should also be allocated for promoting and implementing CPP at company level in the garments manufacturing industry. As stated earlier, CSR spectates organizations’ concern towards social and societal issues; however, CPP shows their concern towards environmental issues as well. Therefore, considering this fact implementation of CPP is irrefutably of more importance in terms of determining DSIW in the garments manufacturing industry. Furthermore, it is anticipated that these finding will be useful in the enhanced comprehension of personality traits at workplace. Policy makers, CSR planners, HR managers and top-management can also use the findings of our IPMA analysis, which have confirmed that CPP is a construct of highest importance and highest performance as compared to SQ and CSR for enhancing DSIW in the garments manufacturing industry. Therefore, it is anticipated that results derived from this study shall be of great help to the academicians and managers responsible for implementing CPP, SQ and CSR at company level in the garments manufacturing industry.

5.3. Limitations and future research directions

Limitations faced during this study are highlighted to serve as suggestions/future research directions for academicians in the domain of CPP, SQ and CSR. Conclusions drawn from this study can be useful in revamping and better comprehension of the cognitive facets of the implementation of CPP at company level as a major tool for reining in the point source pollution instigated by garments manufacturing industry. However, more studies are warranted to evaluate the wide range cognitive impacts of the non-point source pollution (e.g. recent bushfire in Australia) which can have diverse catastrophic effects along-with multiple atmospheric and unwanted dispositions (Sawden, 2020; Gorman, 2020; Government of New South Wales, 2020; United States Environmental Protection Agency, 2020). As per United States Environmental Protection Agency (2020), non-point source pollution is more catastrophic than point source pollution. Therefore, more studies are solicited to thoroughly examine the cognitive aspects and significance of CPP in the context of non-point source pollution at individual level. Further, mediation and moderation of EE, OP and OI between the implementation of CPP, SQ, CSR and DSIW was not in the scope of this manuscript. However, future studies can employ Farooq and Salam’s (2020, p. 7) model for assessing the mediation and moderation of EE, OP and OI between the implementation of CPP, SQ, CSR and DSIW in the garments manufacturing industry. Moreover, as described in the research methodology and data analysis section our data collection was confined to the non-managerial staff only. Considering the suggestions of Gouthier and Rhein (2011, p. 640) and Farooq and Salam (2020, p. 13) we excluded top management, executives, middle managers, functional managers and first line managers from our sampling frame.

For that reason, we suggest that future researchers can perform a comparative assessment or a multi-group analysis (MGA) of non-managerial staff and managerial position holders in the garments manufacturing industry. Further, as suggested in the discussion of findings section, future researchers can consider revamping the phenomenon of DSIW for assessing it’s practicable progression through PSIW by employing Salam and Farooq’s (2020) concept of sociability quality. Besides this, future studies can explore the impact of COVID-19 pandemic on the implementation of CPP in the garments manufacturing industry. Moreover, according to Salam and Farooq (2020) relation between SQ and cultural settings is also unknown to date. However, due to our resource constraints data was collected from only one selected garments manufacturing company in Pakistan. Consequently, cross-cultural analysis of the impact of the implementation of CPP, SQ and CSR was not assessed in this study. Considering this as a limitation of this study we recommend cross-cultural analysis of the implementation of trio as a future research direction for other scholars in this field. Furthermore, due to limitation of resources a cross-sectional method was employed; for that reason, longitudinal assessment of the long-term influence of the implementation of CPP, SQ and CSR was not potentially tenable in this study. Therefore, we solicit future studies to assess the longitudinal influence of the implementation of trio in the garments manufacturing industry.

CRediT authorship contribution statement

Muhammad Shoaib Farooq: Writing - original draft, Methodology, Formal analysis, Investigation. Maimoona Salam: Writing - original draft, Supervision, Software, Conceptualization, Validation, Project administration, Investigation, Visualization, Writing - review & editing.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A and B. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.jclepro.2020.124605.

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